INTERIM DATA SUMMARY REPORT GROUNDWATER

PCB INVESTIGATION AT SITE 1 - FORMER DRUM MARSHALLING AREA

Naval Weapons Industrial Reserve Plant Bethpage, New York



Naval Facilities Engineering Command Mid-Atlantic

CONTRACT NUMBER N62470-08-D-1001 Contract Task Order WE44

September 2012



INTERIM DATA SUMMARY REPORT GROUNDWATER

PCB INVESTIGATION AT SITE 1 -FORMER DRUM MARSHALLING AREA

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK

Submitted to:
Naval Facilities Engineering Command Mid-Atlantic
9742 Maryland Avenue
Norfolk, Virginia 23511-3095

Submitted by: Tetra Tech, Inc. 234 Mall Boulevard Suite 260 King of Prussia, Pennsylvania 19406

In Support Of:

N62470-08-D-1001 Contract Task Order WE44

September 2012

PREPARED UNDER THE DIRECTION OF:

ROBERT SOK PROJECT MANAGER TETRA TECH, INC. NORFOLK, VIRGINIA APPROVED FOR SUBMISSION BY:

JOHN TREPANOWSKI, P.E.

PROGRAM MANAGER TETRA TECH, INC.

KING OF PRUSSIA, PENNSYLVANIA

TABLE OF CONTENTS

SEC1	TON		PAGE
ACR	ONYMS.		A-1
1.0	1.1	SCOPE AND OBJECTIVES	1-1
	1.2	REPORT ORGANIZATION	1-2
2.0	SITE I	BACKGROUND	2-1
	2.1	SITE DESCRIPTION	2-1
	2.2	ENVIRONMENTAL SETTING	
	2.2.1	Topography and Drainage	
	2.2.2	Geology and Soils	
	2.2.3	Hydrogeology	
3.0	FIELD	INVESTIGATION	3-1
	3.1	FIELD AND SAMPLING ACTIVITIES	3-1
	3.1.1	Surface Water Sampling	
	3.1.2	Soil Borings	
	3.1.3	Monitoring Well Installation	
	3.1.4	Groundwater Flow and Sampling	
	3.1.5	Surveying	
4.0	FINDI	NGS AND ANALYTICAL RESULTS	4-1
	4.1	INTRODUCTION	4-1
	4.2	GEOLOGY	
	4.3	SURFACE WATER SAMPLING RESULTS	
	4.4	GROUNDWATER SAMPLING RESULTS	
	4.4.1	Groundwater Test Kit Results	
	4.4.2	Monitoring Well Sampling Results	
5.0	CONC	CLUSIONS AND RECOMMENDATIONS	5-1
RFFF	RENCE	9	R-1

APPENDICES - (SEE ATTACHED CD)

A B C D	Field Forms, Logsheets, and Documentation Survey Data Chain of Custody Forms and Analytical Results Validation Summaries SAP Addendum
	TABLES
3-1 3-2 4-1 4-2 4-3	Monitoring Well Construction Details Groundwater Elevation Summary Analytical Detections – Surface Water Field Test Kit and Lab Chromium Results Laboratory Analytical Detections – Monitoring Wells
	FIGURES
1-1 1-2 2-1 3-1 3-2 3-3 3-4 4-1 4-2 4-3 4-4 4-5 4-6 4-7	General Location Map Site Location Map Site Layout Map Sample Location Map Potentiometric Surface Map – Shallow January 2012 Potentiometric Surface Map – Intermediate January 2012 Potentiometric Surface Map – Deep January 2012 Cross Section Location Map Geologic Cross Section A-A' Geologic Cross Section B-B' Geologic Cross Section C-C' Groundwater Analytical Detections – Shallow Monitoring Wells Groundwater Analytical Detections – Intermediate Monitoring Wells Groundwater Analytical Detections – Deep Monitoring Wells

ACRONYMS

AOC Area of Concern

AST Aboveground Storage Tank

bgs below ground surface

CLEAN Comprehensive Long-Term Environmental Action Navy

CTO Contract Task Order

ER Environmental Restoration

FS Feasibility Study

ft/day feet per day

GOCO Government-Owned Contractor-Operated

gpm gallons per minute
HNUS Halliburton NUS
HSA Hollow Stem Auger

IDW Investigation-Derived Waste
MCL Maximum Contaminant Level

mg/L milligrams per liter

MS/MSD matrix spike/matrix spike duplicate

NAVFAC Naval Facilities Engineering Command Mid-Atlantic

NGC Northrop Grumman Corporation
NTU Nephelometric Turbidity Unit

NWIRP Naval Weapons Industrial Reserve Plant

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health

ORP Oxygen Reduction Potential
PCB Polychlorinated biphenyl

PCE Tetrachloroethene
PVC Polyvinyl chloride
QA Quality Assurance

RCRA Resource Conservation and Recovery Act

SAP Sampling and Analysis Plan

TOC Total Organic Carbon

TCE Trichloroethene

UFP Uniform Federal Policy
VOC Volatile organic compound

μg/L microgram per liter

1.0 INTRODUCTION

This Data Summary Report was prepared by Tetra Tech, Inc. for the Naval Facilities Engineering Command (NAVFAC) - Mid-Atlantic under the U.S. Navy's Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract number N62470-08-D-1001, Contract Task Order (CTO) WE44. The Data Summary Report presents the field activities at Site 1 – Former Drum Marshalling Area conducted from April 2011 through January 2012 at the Naval Weapons Industrial Reserve Plant (NWIRP) located in Bethpage, New York (Figures 1-1 and 1-2). The field activities consisted of the following: surface water sampling, soil borings, down hole geophysical logging, monitoring well installation and development, and groundwater sampling. Procedures, methods, and rational were presented in the Uniform Federal Policy (UFP) Sampling and Analysis Plan (SAP) (Tetra Tech, 2010a) and the subsequent SAP Addendum (Tetra Tech, 2011). Groundwater investigation activities were conducted in accordance with the Navy Environmental Restoration (ER) Program and New York State Department of Environmental Conservation (NYSDEC) Resource Conservation and Recovery Act (RCRA) permit number NYD003995198.

1.1 SCOPE AND OBJECTIVES

This document summarizes the groundwater investigation activities conducted at the NWIRP Bethpage Site 1 – Former Drum Marshalling Area between April 2011 and January 2012. The primary objectives of the investigation were to further define the extent of polychlorinated biphenyls (PCBs) and hexavalent chromium detected in groundwater and investigate potential upgradient source areas (former sludge drying beds and NWIRP recharge basins).

Before this investigation, the existing groundwater monitoring well network at Site 1 consisted of twenty monitoring wells extending from 20 feet north to 250 feet south of the Site 1 boundaries. Groundwater flow is generally to the south across the Site. Sampling of these monitoring wells in November 2010 and March 2011 indicated concentrations of PCBs near or above New York State Department of Health (NYSDOH) maximum contaminant levels (MCLs) and hexavalent chromium detections were reported in some monitoring wells. Additional shallow, intermediate, and deep monitoring wells were installed from October through December 2011 upgradient and downgradient of Site 1 to better define the extent of PCB impacted groundwater. Total chromium and hexavalent chromium sampling was also added to the analytical suite for all monitoring wells after some detections were observed in select monitoring wells during the March 2011 groundwater sampling event.

A description of the field activities is presented in Section 3.0 of this report. The field work conducted from April 2011 to January 2012 is summarized as follows:

- Collected surface water samples from two former NWIRP recharge basins
- Advanced five deep soil borings with split spoons collected at select intervals
- Gamma logging from the deep borings for lithology
- Installed and developed fifteen new monitoring wells
- Sampled thirty-four monitoring wells for VOCs, in January 2012
- Surveyed the fifteen newly installed monitoring wells

1.2 REPORT ORGANIZATION

This Data Summary Report provides general implementation information and the approach used in conducting the groundwater investigation activities from April 2011 to January 2012 at Site 1. The report consists of five sections. Section 1.0 provides an introduction. Section 2.0 provides the facility background and environmental setting. Section 3.0 provides a summary of the field activities. Section 4.0 presents the findings and analytical results, and Section 5.0 presents the conclusion and recommendations.

2.0 BACKGROUND

2.1 SITE DESCRIPTION

The Navy's Bethpage facility is located in east-central Nassau County, Long Island, New York, approximately 30 miles east of New York City (Figure 1-1). Established in 1943, the property known as NWIRP Bethpage was originally situated on 109 acres entirely within the Northrop Grumman Aerospace complex. NWIRP Bethpage was a Government-Owned Contractor Operated (GOCO) facility that was operated by the Northrop Grumman Corporation (NGC) until September 1998. Since 1998, the Navy transferred 100 acres to Nassau County. The remaining 9-acre parcel is being retained by the Navy for environmental investigations and remediation. Other than environmental investigation and cleanup work, there are no operations conducted on the Navy's property that generate hazardous waste.

Site 1 - Former Drum Marshalling Area is located in the eastern portion of the Navy's 9-acre parcel. Site 1 is mostly an open area, which in the past included above ground storage tanks (Areas of Concern [AOC] 23), a sanitary settling tank, and sludge drying beds (AOC 35). All these structures were located in the northern portion of the site, as well as a few scattered metal storage buildings. In general this area is relatively flat except for a 4-foot vegetated windrow located along the eastern end of the site, and a mounded area which partially buries the abandoned sanitary settling tank. The site is enclosed by a site perimeter fence along the north, west and south, with an eastern facility perimeter fence bounding the site from a residential neighborhood to the east. Figure 2-1 provides a site layout and aerial view of Site 1.

Site 1 originally consisted of two former drum marshalling pads located in the center of the site that were used to store drums containing waste materials from operations at Plant No. 3 and potentially other wastes from operations at the facility. Transformers and a PCB-filled autoclave were also stored at the site. Underlying most of Site 1 is approximately 120 abandoned cesspools that were designed to discharge sanitary waste waters from Plant No. 3. These cesspools were approximately 10 feet in diameter and 16 feet deep. Based on field observations, the cesspools are currently filled with soil. It is possible that non-sanitary wastes may have been discharged into this system. The drum marshalling areas and extent of the leach field were the original extent of Site 1.

In addition to the original extent of Site 1, due to proximity, similar contamination, and potential need for remedial actions, AOC 23, AOC 35, and dry-wells 20-08 and 34-07 were subsequently included as a part of Site 1.

2.2 ENVIRONMENTAL SETTING

2.2.1 Topography and Drainage

NWIRP Bethpage is located in an area underlain by permeable glacial deposits and characterized by limited surface water drainage features. Normal precipitation at the facility is expected to infiltrate rapidly into the soil. NWIRP recharge basins, which receive storm water runoff, are located in the northeastern portion of the facility north of Site 1. NWIRP Bethpage occupies a relatively flat, intermorainal area, and has very little topographic relief.

2.2.2 Geology and Soils

NWIRP Bethpage is underlain by approximately 1,100 feet of unconsolidated sediments that overlie crystalline bedrock (Isbister, 1966). The unconsolidated sediments consist of four distinct geologic units: (in descending order) Upper Glacial Formation, Magothy Formation, Raritan Clay, and Lloyd Sand Formation. The 30- to 45-foot-thick Upper Glacial Formation consists chiefly of coarse sands and gravels. The Upper Magothy Formation consists primarily of coarse sands to a depth of approximately 100 feet, below which finer sands and silts predominate along with some clay layers. These clay layers are common but laterally discontinuous; no individual clay horizon of regional extent has been observed in the Upper Magothy Formation. The 100- to 150-foot-thick Raritan Clay underlies the Magothy Formation at a depth of approximately 700 to 800 feet below ground surface (bgs). The underlying Lloyd Sand Formation is approximately 300 feet thick.

2.2.3 <u>Hydrogeology</u>

Most of Long Island is bisected by an east-west-trending regional groundwater divide. NWIRP Bethpage occupies an area of recharge, lying to the south of the divide. Groundwater is in contact with the Upper Glacial and Upper Magothy Formations beneath the facility, and may be considered a common unconfined aquifer. The glacial deposits are characterized by a high primary porosity (exceeding 30 percent) and high permeability. The high permeability of the glacial deposits allows for the rapid recharge of precipitation to the underlying Magothy (Isbister, 1966; McClymonds and Franke, 1972). The number and thickness of clay lenses increase with depth in the Magothy Formation; however, the horizontally discontinuous nature of these units prevents any one of them from functioning as a competent aquitard or confining unit.

Groundwater beneath the Site flows in a general southerly direction toward the Atlantic Ocean. Across the facility, the horizontal hydraulic gradient and groundwater velocity in the unconfined common aquifer

averages 5.3 feet per mile and 0.3 foot per day (ft/day), respectively [Halliburton NUS (HNUS), 1993]. Subtle vertical hydraulic gradients occur in a downward direction. Groundwater in the deeper portion of the Magothy is the primary source of potable water in Nassau County. Groundwater is encountered at a depth of approximately 50 feet bgs at the facility. Historically, because of pumping and recharge at the facility, groundwater has been measured from depths ranging from 40 to 60 feet bgs.

Prior to 1998, the groundwater flow dynamics beneath the NWIRP and Grumman were complex. A total of 16 deep production wells (7 on the NWIRP and 9 on Grumman property) existed which were set in the Magothy and each yielded approximately 1,200 gallons per minute (gpm). All of the production wells on the Navy's property have been abandoned. The extracted water was mostly used for non-contact single pass cooling and then discharged into recharge basins located on Navy and Northrop Grumman property. Based on extraction and recharge rates and well locations, groundwater on the Navy property flowed predominately west and southwest. In addition, the production wells extracted groundwater from depths of approximately 500 feet bgs and the water was recharged in the basins near grade. The extraction from the production wells and near surface recharge resulted in vertical gradients at the Site. Grumman continues to operate production wells (as well as a groundwater containment system) south of NWIRP Bethpage. The production wells and groundwater containment system operates with a combined flow rate of approximately 3,800 gpm.

The Magothy aquifer is highly conductive. For example, in the 1995 Feasibility Study (FS) investigation's pumping test no. 2, the pumping of production well PW-11 located on the Navy's property at nearly 1,000 gpm for 72 hours produced little or no measurable drawdown in the nearby observation wells or other production wells.

3.0 FIELD INVESTIGATION

3.1 FIELD AND SAMPLING ACTIVITIES

This additional PCB field investigation was conducted to address the following objectives (Interim Data Summary Report and SAP Addendum, Tetra Tech, 2011):

- Further delineate the extent of PCB and hexavalent chromium contamination in groundwater
- Investigate potential upgradient source areas (former sludge drying beds and NWIRP recharge basins)

The field sampling activities included the sampling of surface water, advancement of soil borings, permanent monitoring well installation, monitoring well development, sampling of new and existing monitoring wells, and surveying. These activities were conducted to meet the project objectives presented above and determine a path forward for further investigation and support future remedial evaluations.

The following subsections summarize the field investigation activities and identify the sampling locations and type of samples that were collected during the investigation.

3.1.1 Surface Water Sampling

On October 19, 2011 two surface water samples were collected from the outfalls into the southwestern (BPS1-SW3001) and northeastern (BPS1-SW3002) former NWIRP recharge basins. Approximately 1.2 inches of precipitation was recorded the three days prior to sampling. The outfall into the southwestern basin mainly receives storm water runoff from Plant #3 and the northeast basin receives storm water runoff from Aerospace Boulevard and northern portions of the former NWIRP property. The northeast basin also receives discharge water from the Northrup Grumman IRM system which is located just east of this basin. The surface water samples were analyzed for volatile organic compounds (VOCs), PCBs, total chromium, and hexavalent chromium. Figure 3-1 depicts the location of the two surface water samples. The samples were collected at the concrete outfalls and filled directly with storm water runoff.

3.1.2 **Soil Borings**

In October and November 2011, five deep soil borings were advanced using mud rotary and hollow stem auger (HSA) drilling methods at each monitoring well cluster location. The soil boring locations (BPS1-TT-MW305, -MW306, -MW307, -MW307, -MW308, and -MW309) are presented on Figure 3-1 and the

boring logs and gamma logs are presented in Appendix A. At each location an 8-inch surface casing was installed to approximately 25 feet bgs. Soil cuttings generated during drilling were screened with a photoionization detector and lithologically logged. Split spoon samples were collected at select intervals to confirm lithology. Gamma logging was conducted at each soil boring and was interpreted to confirm the presence of fine grained lithology (i.e., clay) down to 300 feet bgs. BPS1-TT-MW307 was the only location which did not exhibit a substantial gamma ray spike around 300 feet bgs which is indicative of a silt or clay unit and the boring was advanced to a total depth of 435 feet bgs. Only a varying predominate sandy lithology was encountered at depth. The soil boring at BPS1-TT-MW307 was thus discontinued.

All soil cuttings were containerized and treated as Investigation Derived Waste (IDW). After waste characterization was complete, the soils were transported and disposed of off-site at an approved disposal facility by the IDW subcontractor.

3.1.3 Monitoring Well Installation

Five monitoring well clusters, consisting of three monitoring wells, were installed via mud rotary and/or HSA drilling methods from October through December 2011. Each monitoring well cluster consisted of a shallow water table well, an intermediate well, and a deep well. Shallow monitoring well screen intervals ranged from 40 to 65 feet bgs in depth, intermediate wells from 150 to 200 feet, and deeper wells from 250 to 300 feet. Two monitoring well clusters (BPS1-TT-MW308 and -MW309) were installed in the hydraulically upgradient (north) of Site 1 and three monitoring well clusters (BPS1-TT-MW305, -MW306, and -MW307) were installed hydraulically downgradient (south) of Site 1. The upgradient clusters were installed to investigate the potential upgradient sources of the former sludge beds and NWIRP recharge basins to the north. The former sludge drying beds are hydraulically upgradient of Site 1 and are located approximately 550 feet north of the BPS1-TT-MW301 cluster. The three downgradient well clusters were installed approximately 400 feet south of three existing downgradient monitoring well clusters (BPS1-TT-MW302, -MW303, and -MW304). The monitoring well locations are presented on Figure 3-1 and the construction details are provided in Table 3-1.

At each monitoring well cluster, the deep monitoring wells were installed in the deep soil borings using mud rotary drilling methods, while the shallow and intermediate monitoring wells were installed via HSA drilling. Before the deep monitoring wells were installed the drilling mud within the soil boring was thinned and if the soil boring was deeper than needed, it was backfilled with #1 silica sand to the appropriate depth for well installation. For the shallow and intermediate monitoring wells the augers were advanced to the target depths (determined from gamma logs and split spoon sampling) and filled with potable water to limit flowing sands. Each monitoring well was constructed with a 2-inch diameter, 10-foot, 0.010-inch slot, schedule 40 polyvinyl chloride (PVC) screen and riser pipe. A #1 silica sand pack was installed from

1 foot below to a minimum of 3 feet above the screened interval, except for the deep wells where the sand pack extended approximately 10 feet above the screen. The deep wells were constructed without a bentonite seal and with a thicker sand pack due to the difficulty of setting a bentonite seal through the drilling mud. For the shallow and intermediate monitoring wells a 3- to 5-foot bentonite seal consisting of coated bentonite pellets was placed above the sand pack and allowed to hydrate prior to grouting. High solids bentonite-cement grout slurry was then pumped via tremie pipe up to the ground surface. Protective steel stick-up casings were installed at the BPS1-TT-MW306, -MW308, and -MW309 monitoring well clusters. Flush mount well covers were installed at the BPS1-TT-MW305 and -MW307 monitoring well clusters, while the wells at BPS1-TT-MW301 were converted from stick-ups to flush mounts due to potential high traffic in this area from commercial redevelopment activities.

Well development was conducted using both airlifting and submersible pump development methods. The well development of the intermediate and deep monitoring wells consisted of airlifting followed by surging/purging with a submersible pump (Grundfos). Development of the shallow monitoring wells was only possible by surging/purging with a submersible pump (Grundfos). During well development, groundwater parameters were measured every 5 minutes and included: pH, specific conductivity, temperature, turbidity, and oxygen reduction potential (ORP). Development was concluded after parameter stabilization was achieved and approximately 400 gallons of water was purged from each shallow monitoring well and a minimum of 550 gallons was purged at each intermediate/deep monitoring well. Monitoring well construction and development records are presented in Appendix A. Development water was containerized and treated as IDW.

3.1.4 Groundwater Flow and Sampling

Groundwater sampling was conducted from January 10 through January 23, 2012 using low flow sampling techniques. A Grundfos Rediflo pump was used for groundwater purging and sample collection activities. Groundwater parameters and turbidity measurements were collected at each monitoring well during purging and allowed to stabilize before sampling. Each monitoring well was field tested for hexavalent chromium and groundwater samples were also collected for VOC, PCB, and metal analysis by a fixed based lab. At well locations were test kit results indicated a positive detection of hexavalent chromium greater than 0.01 milligrams per liter (mg/L) a sample was collected for analysis by fixed based lab to confirm the result. Groundwater sample log sheets and low flow purge data sheets are presented in Appendix A.

The hexavalent chromium field test kit followed HACH Method 8023 (1,5-Diphenylcarbohydrazide Method) using a HACH DR/890 colorimeter and associated ChromaVer 3 Chromium Reagent Powder Pillows. At the start of each day a 0.5 mg/L Hexavalent Chromium standard solution was prepared to

check and confirm calibration of the colorimeter. During testing two vials were filled with groundwater, one of which was the blank and the other was the sample in which the ChromaVer 3 Chromium Reagent Powder Pillow was added. If the groundwater was turbid (>50 Nephelometric Turbidity Units [NTUs]) an Acid Reagent Powder Pillow was added to the blank sample. After 5 minutes the blank sample vial was then run to zero out the colorimeter which was followed by the sample vial with the reagent, to provide the final result.

Quality Assurance (QA) samples were taken during groundwater sampling and included rinsate blanks, source water blanks, field duplicates, matrix spike matrix duplicated (MSMSD), and trip blanks. QA sample log sheets are presented in Appendix A.

Purge water generated during monitoring well sampling was containerized and treated as IDW.

On January 24, 2012 a round of synoptic groundwater measurements were collected. These measurements were used to generate groundwater elevation contour maps and provide information on groundwater flow patterns and gradients (see Appendix A for Groundwater Level Measurement Sheets). Figure 3-2, 3-3, and 3-4 present the January 2012 potentiometic surface for shallow, intermediate, and deep monitoring wells, respectively. Based on the groundwater levels, a slight downward vertical gradient is observed between shallow and deeper monitoring wells and a south to southeast groundwater flow is apparent at Site 1. Table 3-2 provides a summary of the groundwater elevations at Site 1.

3.1.5 Surveying

The newly installed monitoring wells and area surveys around the monitoring wells were surveyed by BANC3, a New York State licensed surveyor, on January 26, 2012. Each location was surveyed for horizontal position and vertical components including both ground surface and top of casing elevations for each monitoring well location. Horizontal measurements were accurate to 0.1 foot while vertical elevation measurements were accurate to 0.01 foot at each location. The area surveys consisted of four horizontal survey points bounding the monitoring wells not on Navy property for future easement agreements. A summary of the survey results can be found in Appendix B.

4.0 FINDINGS AND ANALYTICAL RESULTS

4.1 INTRODUCTION

Results from this additional PCB field investigation consisted of geologic observations, hydrogeological findings, and field test kit and fixed-based laboratory analytical results of groundwater and surface water samples. The following subsections describe the findings and analytical results.

4.2 GEOLOGY AND HYDROGEOLOGY

The geology encountered in the study area was variable both horizontally and vertically. Medium to course sand and gravel was consistently observed in the upper 30 feet of each boring. Below 30 feet, fine grained silty sands predominate along with some clay and potential lignite layers that range in thickness from a few inches to approximately 10 feet thick.

A cross section location map (Figure 4-1) presents the cross sections generated to present the lithological interpretations across the study area. Figure 4-2 presents Cross Section A-A' which runs north to south through the study area. Figures 4-3 and 4-4 present Cross Sections B-B' and C-C' which run east to west, approximately 400 feet apart, with each cross section interpreted through three downgradient soil borings/monitoring well locations.

Lithologic data collected from soil cores, split spoon samples, and gamma logs were used to interpret the subsurface lithology presented on the cross sections. By comparing the lithologic data and gamma ray signatures from adjacent soil borings, most of the silt and clay layers above 150 feet bgs appear to be discontinuous. Below 150 feet bgs the gamma ray signatures of the clay and silt layers have enough similarities to connect some of these fine-grained units. Notable semi-confining units, approximately 10 feet thick, appear to be present from BPS1-TT-MW309D to BPS1-TT-SB3002 between 250 and 300 feet bgs and from BPS1-SB3007 and BPS1-TT-MW306D between 200 and 250 feet bgs, see Figures 4-2 and 4-3. Figure 4-4 presents the geology encountered at the southernmost extent of the study area. Between 150 and 200 feet bgs there appears to be a series of semi-confining units, below which the clay layers become more discontinuous and much thinner. These semi-confining units appear to impede PCB-contaminated groundwater from migrating deeper, but do not completely prevent PCB-contaminated groundwater from reaching depths deeper than 250 feet bgs.

The soil boring at BPS1-TT-MW307D was advanced to a depth of 435 feet bgs. Below 300 feet bgs no fine-grained layers were encountered and the predominant sandy formation coarsened with depth.

Based on the lithology observed in the new soil borings and the borings advanced in 2009 and 2010, monitoring wells were installed at depths just above potential semi-confining units observed in the soil borings and/or at depths where contamination was observed in upgradient wells. Table 3-1 presents the construction details for each on the monitoring wells installed during this investigation.

4.3 SURFACE WATER SAMPLE RESULTS

Two surface water samples were collected from the outfalls into the southwestern (BPS1-SW3001) and northeastern (BPS1-SW3002) former NWIRP recharge basins (Figure 3-1). Approximately 1.2 inches of precipitation was recorded the three days prior to sampling. The samples were collected at the concrete outfalls and filled directly with storm water runoff and sampled for VOCs, PCBs, total chromium, and hexavalent chromium. Table 4-1 provides a summary of the analytical results. Aroclor-1248 was detected at BPS1-SW3001 at 0.35 micrograms per liter (μ g/L) and PCBs were not detected at BPS1-SW3002. Total chromium (2.4 and 0.84 μ g/L) and hexavalent chromium (0.4 and 0.4 μ g/L) were detected at BPS1-SW3001 and BPS1-SW3002 respectively. VOCs were not detected in either of the two surface water samples.

4.4 GROUNDWATER SAMPLING RESULTS

4.4.1 Groundwater Test Kit Results

Hexavalent chromium field test kits were used at each monitoring well during the January 2012 sampling event. Table 4-2 provides a summary of the field test kit results at each well location along with the corresponding fixed-based laboratory results for chromium and hexavalent chromium. The hexavalent chromium test kit results ranged from non-detect to 180 μ g/L. Concentrations (>10 μ g/L) of hexavalent chromium were observed at BPS1-TT-MW301D (90 μ g/L), -MW304I1 (40 μ g/L), -MW304I2 (180 μ g/L), and -MW309I (60 μ g/L). Further discussion on these results is provided in the following section.

4.4.2 Monitoring Well Sampling Results

During the January 2012 sampling event thirty-four monitoring wells were sampled and analyzed for VOCs, PCBs, and total chromium and iron by TriMatrix Laboratories of Grand Rapids, Michigan. Select monitoring wells were also sampled for TOC, hexavalent chromium, filtered chromium and iron, and total calcium and sodium. Table 4-3 provides a summary of the analytical results with the associated Federal and NYSDOH MCLs for each detected compound for comparison. Figures 4-5, 4-6, and 4-7 provide a summary of the distribution and concentrations of the detected compounds in the shallow, intermediate, and deep monitoring wells respectively.

Aroclor-1242 or Aroclor-1248 was detected by the laboratory in 30 of the 34 groundwater samples. The laboratory indicated that a conclusive PCB Aroclor identification was not possible due to the signature interference and/or weathering of the PCBs. Validation of the laboratory results indicated that both Aroclor-1242 and Aroclor-1248 have several common peaks and similar patterns in their standard chromatograms. Because of these similarities, it was difficult to determine the predominant Aroclor or how to precisely quantify each Aroclor separately. Therefore the laboratory reported a single Aroclor mixture, either Aroclor-1242 or Aroclor-1248. A "weathering effect" or degradation of compounds within the specific mixtures is also a likely factor in precisely identifying the Aroclor mixture present. Despite these complexities, validation concluded that an Aroclor mixture is present in the affected samples. Due to the uncertainties speciating Aroclor-1242 and Aroclor-1248, detected Aroclors will be treated as a single Aroclor and referenced in the following text as PCBs.

PCBs were detected in 30 of the 34 groundwater samples collected, with 22 of the samples indicating concentrations of PCBs exceeding the Federal and NYSDOH MCL of 0.5 μg/L during the January 2012 sampling event. Of the nine monitoring wells located upgradient of Site 1, PCBs were not detected in only one monitoring well (BPS1-TT-MW309D). Concentrations in five of these upgradient wells were above the MCL including the highest observed PCB detection of 10 μg/L at BPS1-TT-MW301S. All three monitoring wells on the downgradient edge of Site 1 (BPS1-FW01, FW02, FW03, and HN29I) showed detections of PCBs, but only one monitoring well (BPS1-FW-MW03 at 1.9 μg/L) exceeded the MCL. Of the 22 downgradient monitoring wells, 19 wells had detections of PCBs with 17 of these monitoring wells having concentrations exceeding the MCL. Four out of the twelve shallow monitoring wells across the study area indicated concentrations of PCBs exceeding the MCL. Sampling results from the intermediate and deep monitoring wells showed MCL exceedences of PCBs in 19 out of 22 samples.

A total of fourteen VOCs were detected in groundwater, with four VOCs (1,1,1-trichloroethane, cis-1,2-dichloroethene, tetrachloroethene [PCE], and trichloroethene [TCE]) exceeding the corresponding NYSDOH and/or Federal MCLs. 1,1,1-trichloroethane exceeded NYSDOH MCL of 5 μ g/L at BPS1-FW-MW01 with a concentration of 8.3 μ g/L. Cis-1,2-dichloroethene exceeded the NYSDOH MCL of 5 μ g/L at two monitoring wells with concentrations ranging from 6 μ g/L at BPS1-TT-MW304I1 to 70 μ g/L at BPS1-FW-MW01. Six of the monitoring well samples indicated concentrations of PCE above the MCLs with detections ranging from 5.5 to 200 μ g/L. The highest detection of PCE was observed at BPS1-FW-MW01. TCE exceeded the MCL of 5 μ g/L at 4 monitoring wells (BPS1-FW-MW01, BPS1-TT-MW303I1, -MW305I, and -MW305D with concentrations ranging from 18 to 3900 μ g/L. The highest concentrations of TCE were observed at BPS1-TT-MW305I (3900 μ g/L) and BPS1-TT-MW305D (140 μ g/L).

Twelve groundwater samples were collected and analyzed for hexavalent chromium by the fixed-based laboratory. Hexavalent chromium was detected in six of the twelve groundwater samples and used to correlate and confirm detections observed in the field test kit sampling. Laboratory detections of hexavalent chromium were observed in monitoring wells BPS1-TT-MW301I (5.3 μ g/L), BPS1-TT-MW304I1 (35.5 μ g/L), BPS1-TT-MW304I2 (181 μ g/L), BPS1-TT-MW309S (8.9 μ g/L), and BPS1-TT-MW309I (47.7 μ g/L). Total chromium was detected in all 34 groundwater samples and only exceeded the MCL of 100 μ g/L at BPS1-TT-MW304I2 (200 μ g/L).

Table 4-2 provides a comparison of the hexavalent chromium field test kits and laboratory results for hexavalent chromium and total chromium samples. Hexavalent chromium field test kit results showed good correlation with the fixed-based laboratory results for concentrations that exceeded the detection limit of 10 μ g/L for the field test kits. This correlation is seen in the following detections of hexavalent chromium from the monitoring well samples as presented in Table 4-2: 90 μ g/L and 86 μ g/L at BPS1-TT-MW301D, 40 μ g/L and 35.5 μ g/L at BPS1-TT-MW304I1, 180 μ g/L and 181 μ g/L at BPS1-TT-MW304I2, and 60 μ g/L and 47.7 μ g/L at BPS1-TT-MW309I. When also comparing the total chromium results above 25 μ g/L to the hexavalent chromium results (field test kit and fixed-based laboratory) at each well location, the concentrations also correlated well, indicating that if elevated concentrations of total chromium is detected in groundwater, most of it is likely in the hexavalent form.

Appendix C and D provide the chain of custody forms, analytical results, and validation summaries of the groundwater samples sent for fixed based lab analysis.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions based on the PCB investigation activities are as follows:

- 1. Under current conditions, potentiometric surface mapping of groundwater indicates groundwater flow is south to southeast across Site 1.
- 2. Detections of PCBs and Hexavalent Chromium in groundwater at upgradient monitoring well clusters BPS1-TT-MW301, -MW308, and -MW309 indicate a potential upgradient source that has contributed to PCB-contaminated groundwater north of Site 1.
- 3. TCE was detected at 3,900 μ g/L in monitoring well BPS1-TT-MW305I (southwestern most well cluster along the southern fenceline).
- Hexavalent chromium was detected at concentrations of 86 μg/L at BPS1-TT-MW301D, 35.5 μg/L at MW304I1, 181 μg/L at MW304I2, and 47.7 μg/L at MW309I.
- 5. A good correlation was observed between the hexavalent chromium field test kit results and the fixed-based laboratory for results above the test kit detection limit of 10 μg/L.

Recommendations are as follows:

- 1. Investigate potential upgradient sources of PCB- and hexavalent chromium- contaminated groundwater north of the NWIRP recharge basins and former sludge drying beds.
- 2. Further monitor the occurrence of PCBs, chromium and hexavalent chromium in groundwater to support future remedy evaluations to determine whether Site 1 is a statistically significant source of PCBs detected in groundwater.

Based on the results of the groundwater monitoring through January 2012, additional monitoring wells will be installed upgradient of Site 1 to evaluate potential upgradient sources of contamination. A SAP Addendum is presented in Appendix E and details the additional upgradient well installation and groundwater sampling to be conducted in 2012.

REFERENCES

Halliburton NUS (HNUS), 1993. Phase 2 Remedial Investigation Report for Naval Weapons Industrial Reserve Plant Bethpage, NY. Volume 1. October.

Isbister, J., 1966. Geology and Hydrology of Northeastern Nassau County, Long Island, New York. Water Supply Paper 1925, U.S. Geological Survey.

McClymonds, IN., and 0. Franke, 1972. Water Transmitting Properties of Aquifers on Long Island, New York. U.S. Geological Survey Professional Paper 627-E.

Tetra Tech NUS, Inc. (Tetra Tech), 2010. Final Sampling and Analysis Plan PCB Investigation Site 1-Former Drum Marshalling Area Naval Weapons Industrial Reserve Plant, Bethpage, New York, May.

Tetra Tech NUS, Inc. (Tetra Tech), 2011. Interim Data Summary Report and SAP Addendum PCB Investigation Site 1-Former Drum Marshalling Area Naval Weapons Industrial Reserve Plant, Bethpage, New York, July.

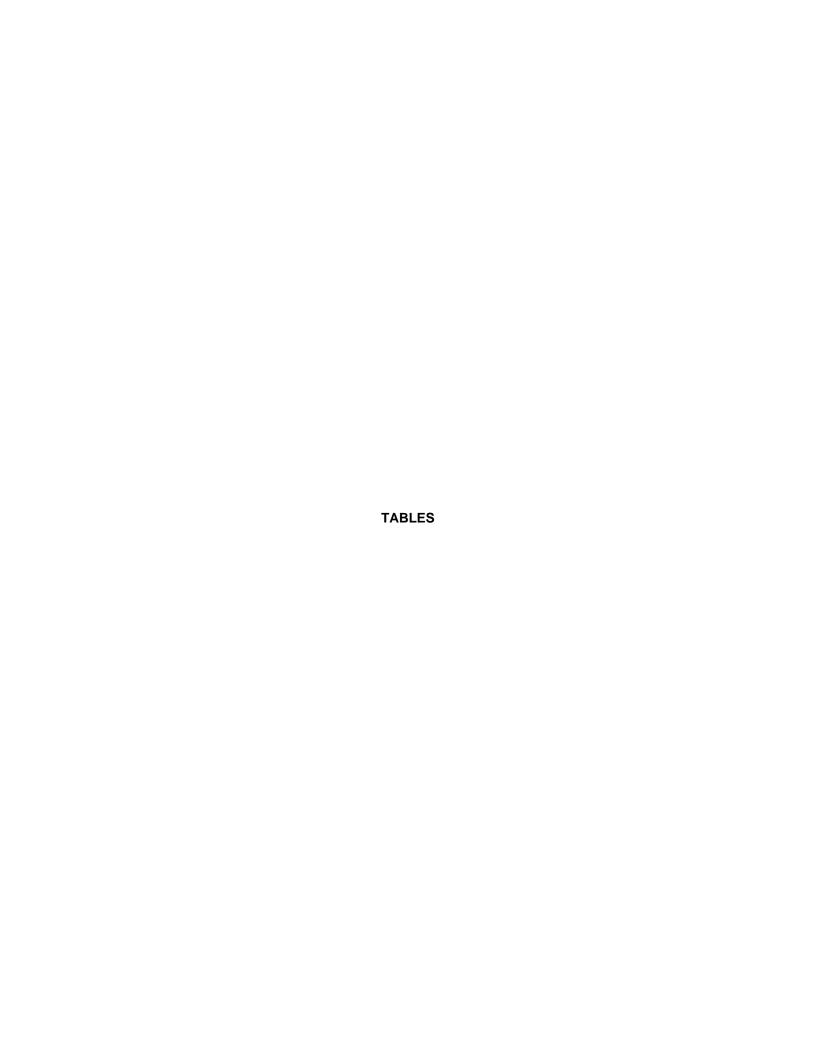


TABLE 3-1 MONITORING WELL CONSTRUCTION DETAILS SITE 1 - FORMER DRUM MARSHALLING AREA NWIRP BETHAPGE, NEW YORK

Monitoring Well ID	Installation Date	Total Depth (feet bgs)	Screened Interval Depth (feet bgs)	Reference Elevation TOC (feet MSL)	Ground Surface Elevation (feet MSL)
BPS1-FW-MW01	NA	63.5 ¹	48.5-63.5 ¹	126.10	123.57
BPS1-FW-MW02	NA	64 ¹	49-64 ¹	126.85	124.23
BPS1-FW-MW03	NA	67 ¹	52-67 ¹	125.46	122.86
BPS1-HN-MW29I	11/26/1991	130.5	120-130	115.37	116.06
BPS1-TT-MW301S	11/10/2010	61	51-61	126	126.38
BPS1-TT-MW301I	11/12/2010	140	130-140	125.56	126.04
BPS1-TT-MW301D	10/29/2010	220	210-220	125.93	126.32
BPS1-TT-MW302S	10/30/2010	51	41-51	116.01	116.32
BPS1-TT-MW302I1	10/26/2010	120	110-120	115.91	116.32
BPS1-TT-MW302I2	10/18/2010	150	140-150	115.91	116.33
BPS1-TT-MW302D	10/16/2010	213	203-213	116.08	116.35
BPS1-TT-MW303S	8/18/2010	56	46-56	115.65	116.06
BPS1-TT-MW303I1	10/19/2010	105	95-105	115.83	116.08
BPS1-TT-MW303I2	10/17/2010	156	146-156	115.89	116.15
BPS1-TT-MW303D	10/14/2010	218	208-218	115.94	116.2
BPS1-TT-MW304S	11/13/2010	53	43-53	119.13	116.49
BPS1-TT-MW304I1	11/11/2010	112	102-112	119.27	116.77
BPS1-TT-MW304I2	11/1/2010	150	140-150	119.18	116.7
BPS1-TT-MW304D	10/27/2010	190	180-190	119.19	116.67
BPS1-TT-MW305S	11/22/2011	50	40-50	116.04	116.52
BPS1-TT-MW305I	11/29/2011	200	190-200	116.16	116.38
BPS1-TT-MW305D	11/21/2011	296	286-296	115.94	116.25
BPS1-TT-MW306S	12/8/2011	60	50-60	117.82	115.33
BPS1-TT-MW306I	12/6/2011	199	189-199	117.76	115.45
BPS1-TT-MW306D	11/28/2011	294	284-294	118.06	115.59
BPS1-TT-MW307S	11/11/2011	50.5	40.5-50.5	114.39	114.59
BPS1-TT-MW307I	11/18/2011	198	188-198	114.16	114.67
BPS1-TT-MW307D	11/11/2011	286	276-286	114.42	114.85
BPS1-TT-MW308S	11/14/2011	64	54-64	131.05	128.586
BPS1-TT-MW308I	11/15/2011	166	156-166	130.73	128.58
BPS1-TT-MW308D	10/31/2011	260	250-260	130.98	128.78
BPS1-TT-MW309S	11/9/2011	63	53-63	131.77	129.41
BPS1-TT-MW309I	11/8/2011	170	160-170	131.83	129.44
BPS1-TT-MW309D	10/20/2011	262	252-262	131.52	129.42
BPS1-RA-MW02	NA	68	58-68	122.15	122.51
BPS1-RA-MW04	NA	68	58-68	NA	NA

NOTES:
bgs = below ground surface
MW = Monitoring Well

MSL = Mean Sea Level

NA = Not Available

TOC = Top of Casing

¹ = Top of Casing Measurement

TABLE 3-2 **GROUNDWATER ELEVATION SUMMARY** SITE 1 - FORMER DRUM MARSHALLING AREA NWIRP BETHPAGE, NEW YORK

Well	Total Depth (feet bgs)	Screened Interval Depth (feet bgs)	Ground Surface Elevation (feet MSL)	TOC Elevation (feet MSL)	Jan. 2012 Water Level (feet BTOC)	Jan. 2012 Water Level (feet MSL)
BPS1-FW-MW01	63.5	48.5-63.5 ¹	123.57	126.1	52.25	73.85
BPS1-FW-MW02	64	49-64 ¹	124.23	126.85	52.89	73.96
BPS1-FW-MW03	67	52-67 ¹	122.86	125.46	51.39	74.07
BPS1-HN-MW29I	130.5	120-130 ²	116.06	115.37	42.15	73.22
BPS1-HN-MW29D	220	210-220	116.07	115.5	42.33	73.17
BPS1-TT-MW301S	62	51-61	126.38	126.00	51.24	74.76
BPS1-TT-MW301I	140	130-140	126.04	125.56	51.08	74.48
BPS1-TT-MW301D	220	210-220	126.32	125.93	51.81	74.12
BPS1-TT-MW302S	51	41-51	116.32	116.01	42.38	73.63
BPS1-TT-MW302I1	120	110-120	116.32	115.91	42.43	73.48
BPS1-TT-MW302I2	150	140-150	116.33	115.91	42.69	73.22
BPS1-TT-MW302D	213	203-213	116.35	116.08	42.96	73.12
BPS1-TT-MW303S	58	46-56	116.06	115.65	42.13	73.52
BPS1-TT-MW303I1	105	95-105	116.08	115.83	42.5	73.33
BPS1-TT-MW303I2	156	146-156	116.15	115.89	42.84	73.05
BPS1-TT-MW303D	218	208-218	116.2	115.94	43.01	72.93
BPS1-TT-MW304S	53	43-53	116.49	119.13	46.03	73.10
BPS1-TT-MW304I1	112	102-112	116.77	119.27	46.26	73.01
BPS1-TT-MW304I2	150	140-150	116.7	119.18	46.45	72.73
BPS1-TT-MW304D	190	180-190	116.67	119.19	46.6	72.59
BPS1-TT-MW305S	50	40-50	116.52	116.04	42.96	73.08
BPS1-TT-MW305I	200	190-200	116.38	116.16	43.55	72.61
BPS1-TT-MW305D	296	286-296	116.25	115.94	43.78	72.16
BPS1-TT-MW306S	60	50-60	115.33	117.82	44.9	72.92
BPS1-TT-MW306I	199	189-199	115.45	117.76	45.34	72.42
BPS1-TT-MW306D	294	284-294	115.59	118.06	46.04	72.02
BPS1-TT-MW307S	50.5	40.5-50.5	114.59	114.39	41.81	72.58
BPS1-TT-MW307I	198	188-198	114.67	114.16	42.21	71.95
BPS1-TT-MW307D	286	276-286	114.85	114.42	42.66	71.76
BPS1-TT-MW308S	64	54-64	128.586	131.05	55.54	75.51
BPS1-TT-MW308I	166	156-166	128.58	130.73	55.7	75.03
BPS1-TT-MW308D	260	250-260	128.78	130.98	56.27	74.71
BPS1-TT-MW309S	63	53-63	129.41	131.77	55.82	75.95
BPS1-TT-MW309I	170	160-170	129.44	131.83	56.45	75.38
BPS1-TT-MW309D	262	252-262	129.42	131.52	56.39	75.13
BPS1-RA-MW02	68	58-68		122.47	47.79	74.68
BPS1-RA-MW04	68	58-68				

Notes: bgs : below ground surface BTOC : Below top of casing MSL : Mean sea level Italics: Estimated value

TABLE 4-1 ANALYTICAL DETECTIONS - SURFACE WATER SITE 1 - FORMER DRUM MARSHALLING AREA NWIRP BETHPAGE, NEW YORK PAGE 1 OF 1

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs (2)	BPS1-SW3001	BPS1-SW3002
Sample Date				10/19/2011	10/19/2011
Polychlorinated Biphenyls (µg/L)					
AROCLOR-1248	12672-29-6	0.5	0.5	0.35 J	0.1 U
Metals (µg/L)					
CHROMIUM	7440-47-3	100	100	2.4	0.84 J
IRON	7439-89-6	NE	300	240	150
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³	0.4 J	0.4 J

Notes:

MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health

 μ g/L = micrograms per liter

U = Non Detect

J = Estimated Value

NE = Not Established

 $^{\rm 1}$ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at

http://www.epa.gov/safewater/contaminants/index.html#primary

² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at

http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm

 $^{^{\}rm 3}$ There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-2 FIELD TEST KIT AND LABORATORY CHROMIUM RESULTS SITE 1 - FORMER DRUM MARSHALLING AREA NWIRP BETHAPGE, NEW YORK

Monitoring Well ID	Screened Interval Depth (feet bgs)	Hexavelent Chromium Test Kit ¹ Result (μg/L)	Hexavalent Chromium Lab Analytical Result (μg/L)	Total Chromium Lab Analytical Result (μg/L)
BPS1-FW-MW01	48.5-63.5	10	-	4.4
BPS1-FW-MW02	49-64	10	-	8.5
BPS1-FW-MW03	52-67	10	-	4.6
BPS1-HN-MW29I	120-130	10	-	5.5
BPS1-TT-MW301S	51-61	10	-	2.5
BPS1-TT-MW301I	130-140	10	5.3	7.0
BPS1-TT-MW301D	210-220	90	86	92
BPS1-TT-MW302S	41-51	10	-	0.63 J
BPS1-TT-MW302I1	110-120	ND	-	1.4
BPS1-TT-MW302I2	140-150	10	-	5.1
BPS1-TT-MW302D	203-213	ND	-	2.3
BPS1-TT-MW303S	46-56	10	-	2.7
BPS1-TT-MW303I1	95-105	ND ²	-	5.8
BPS1-TT-MW303I2	146-156	10	ND	2.4
BPS1-TT-MW303D	208-218	ND	-	5.3
BPS1-TT-MW304S	43-53	ND	-	1.4
BPS1-TT-MW304I1	102-112	40	35.5	38
BPS1-TT-MW304I2	140-150	180	181	200
BPS1-TT-MW304D	180-190	ND	-	4.5
BPS1-TT-MW305S	40-50	ND	-	2.4
BPS1-TT-MW305I	190-200	ND	-	3.5
BPS1-TT-MW305D	286-296	ND	ND	22
BPS1-TT-MW306S	50-60	10	ND	1.3
BPS1-TT-MW306I	189-199	ND	ND	2.3
BPS1-TT-MW306D	284-294	10	-	1.2
BPS1-TT-MW307S	40.5-50.5	ND	-	4.0
BPS1-TT-MW307I	188-198	ND	ND	12
BPS1-TT-MW307D	276-286	ND	-	13
BPS1-TT-MW308S	54-64	ND	-	10
BPS1-TT-MW308I	156-166	ND	-	10
BPS1-TT-MW308D	250-260	10	-	17
BPS1-TT-MW309S	53-63	10 ³	8.9 J	18
BPS1-TT-MW309I	160-170	60 ^{2,3}	47.7	49
BPS1-TT-MW309D	252-262	ND ³	ND	7.5

 $\frac{\text{Notes:}}{\mu g/L = \text{micrograms per liter}}$ bgs = below ground surface ND = Non Detect

J = Estimated Value

¹ Field test kits followed Hach Method 8023

² Acid pillow added to blank sample before running sample due to elevated turbidity

³ Test kit performed two weeks after lab sample collected

TABLE 4-3 ANALYTICAL DETECTIONS MONITORING WELLS SITE 1 - FORMER DRUM MARSHALLING AREA NWIRP BETHPAGE, NEW YORK PAGE 1 OF 5

		1	1			1		1				
	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs (2)	BPS1-FW-MW01- 01192012	BPS1-FW-MW02- 01172012	BPS1-FW-MW03- 01192012	BPS1-HN-MW29I- 01192012	BPS1-HN-MW29I- 01192012 DUPLICATE	BPS1-TT-MW301S- 01172012	BPS1-TT-MW301I- 01172012	BPS1-TT-MW301D- 01172012	BPS1-TT-MW301D- 01232012
Sample Date				1/19/2012	1/17/2012	1/19/2012	1/19/2012	1/19/2012	1/17/2012	1/17/2012	1/17/2012	1/23/2012
Sample Interval (feet bgs)				48.5-63.5	49-64	52-67	120-130	120-130	51-61	130-140	210-220	210-220
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	8.3	0.39 J	0.25 J	0.5 U	0.5 U	0.5 U	0.5 U	0.53 J	
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	1.2	0.36 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
1,1-DICHLOROETHANE	75-34-3	NE	5	3.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.22 J	
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	70	0.5 U	0.49 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.35 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
TETRACHLOROETHENE	127-18-4	5	5	200	21	68	0.49 J	0.46 J	0.5 U	0.5 U	0.26 J	
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
TRICHLOROETHENE	79-01-6	5	5	21	2.7	3.7	0.5 U	0.5 U	0.5 U	0.5 U	2.6	
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.79	0.75 J	
AROCLOR-1248	12672-29-6	0.5	0.5	0.46	0.3	1.9	0.63	0.66	10	0.08 U	0.08 U	
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE				24000					
CHROMIUM	7440-47-3	100	100	4.4	8.5	4.6	5.5	5.2	2.5	7	92	
IRON	7439-89-6	NE	300	860	330	110	83	93	56	17 J	14 J	
SODIUM	82115-62-6	NE	NE				7800					
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³							5.3		86
Filtered Metals (µg/L)						•		•			•	
CHROMIUM	7440-47-3	100	100									
IRON	7439-89-6	NE	300									
Miscellaneous (μg/L)											•	
TOTAL ORGANIC CARBON		NE	NE									

Notes:
MCL = Maximum Contaminant Level NYSDOH = New York State Department of Health

bgs = below ground surface

μg/L = micrograms per liter U = Non Detect

J = Estimated Value

Blank cell = No sample

NE = Not Established

Bolded value indicates exceedance of Federal or NYSDOH MCLs ¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at

http://www.epa.gov/safewater/contaminants/index.html#primary

² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level
Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at

http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm

There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3 ANALYTICAL DETECTIONS MONITORING WELLS SITE 1 - FORMER DRUM MARSHALLING AREA NWIRP BETHPAGE, NEW YORK PAGE 2 OF 5

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs (2)	BPS1-TT-MW302S- 01202012	BPS1-TT-MW302l1- 01202012	BPS1-TT-MW302l2- 01202012	BPS1-TT-MW302D- 01202012	BPS1-TT-MW303S- 01232012	BPS1-TT-MW303S- 01232012 DUPLICATE	BPS1-TT-MW303I1- 01192012	BPS1-TT-MW303I2- 01192012	BPS1-TT-MW303D- 01192012
Sample Date				1/20/2012	1/20/2012	1/20/2012	1/20/2012	1/23/2012	1/23/2012	1/19/2012	1/19/2012	1/19/2012
Sample Interval (feet bgs)				41-51	110-120	140-150	203-213	46-56	46-56	95-105	146-156	208-218
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	0.35 J	0.5 U	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	0.45 J	0.5 U	0.5 U	0.5 U	0.5 U	1.6	0.5 U	0.5 U
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.62 J	0.5 U	0.5 U	1.6	0.5 U	0.5 U
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.5 U	0.29 J	0.5 U	0.33 J	1.9	1.8	83	0.94 J	0.5 U
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.5 U	1.7	1.8	3.9	2.7	2.7	18	1.6	0.51 J
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	3.9	0.08 U	1.6
AROCLOR-1248	12672-29-6	0.5	0.5	0.43	1.2	1.9	0.85	0.21	0.2	0.08 U	2.4	0.085 U
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE				8000					
CHROMIUM	7440-47-3	100	100	0.63 J	1.4	5.1	2.3	2.7	4.2	5.8	2.4	5.3
IRON	7439-89-6	NE	300	22	34	59	75	66 J	210 J	6000	69	520
SODIUM	82115-62-6	NE	NE				24000					
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³				_				1 U	
Filtered Metals (µg/L)					•				•			
CHROMIUM	7440-47-3	100	100							0.23 J		
IRON	7439-89-6	NE	300							70		
Miscellaneous (µg/L)		•							•			•
TOTAL ORGANIC CARBON		NE	NE									

Notes:
MCL = Maximum Contaminant Level NYSDOH = New York State Department of Health

bgs = below ground surface μg/L = micrograms per liter

U = Non Detect

J = Estimated Value

Blank cell = No sample

NE = Not Established

Bolded value indicates exceedance of Federal or NYSDOH MCLs ¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at

http://www.epa.gov/safewater/contaminants/index.html#primary

² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level
Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at

http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm

There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3 ANALYTICAL DETECTIONS MONITORING WELLS SITE 1 - FORMER DRUM MARSHALLING AREA NWIRP BETHPAGE, NEW YORK PAGE 3 OF 5

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs (2)	BPS1-TT-MW304S- 01182012	BPS1-TT-MW304l1- 01182012	BPS1-TT-MW304I2- 01182012	BPS1-TT-MW304I2- 01182012 DUPLICATE	BPS1-TT-MW304D- 01192012	BPS1-TT-MW305S- 01172012	BPS1-TT-MW305S- 01172012 DUPLICATE	BPS1-TT-MW305I- 01172012	BPS1-TT-MW305D- 01172012
Sample Date				1/18/2012	1/18/2012	1/18/2012	1/18/2012	1/19/2012	1/17/2012	1/17/2012	1/17/2012	1/17/2012
Sample Interval (feet bgs)				43-53	102-112	140-150	140-150	180-190	40-50	40-50	190-200	286-296
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	1.7	0.26 J	0.23 J	0.5 U	0.5 U	0.5 U	0.28 J	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	0.33 J
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7	0.57 J
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3	0.73 J
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.27 J	0.19 J
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	6	2.7	2.8	0.5 U	0.5 U	0.5 U	4.7	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.5 U	25	5.5	5.5	0.5 U	0.5 U	0.5 U	3.3	1.9
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.5 U	4.1	1.7	1.8	0.5 U	0.5 U	0.5 U	3900	140
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.91 J	0.94 J
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.16 J
AROCLOR-1248	12672-29-6	0.5	0.5	0.08 U	0.97	1.5	1.6	4.2	0.08 U	0.08 U	1.3	0.08 U
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE									
CHROMIUM	7440-47-3	100	100	1.4	38	200	170	4.5	2.4	2.6	3.5	22
IRON	7439-89-6	NE	300	58	400	16 J	10 J	160	560	650	1100	1100
SODIUM	82115-62-6	NE	NE									
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³		35.5	181	182					1 U
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100								<u> </u>	
IRON	7439-89-6	NE	300									
Miscellaneous (μg/L)												
TOTAL ORGANIC CARBON		NE	NE									

Notes: MCL = Maximum Contaminant Level NYSDOH = New York State Department of Health

bgs = below ground surface μg/L = micrograms per liter

U = Non Detect

J = Estimated Value

Blank cell = No sample

NE = Not Established

Bolded value indicates exceedance of Federal or NYSDOH MCLs ¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at

http://www.epa.gov/safewater/contaminants/index.html#primary

² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level
Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at

http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm

There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used

instead.

TABLE 4-3 ANALYTICAL DETECTIONS MONITORING WELLS SITE 1 - FORMER DRUM MARSHALLING AREA NWIRP BETHPAGE, NEW YORK PAGE 4 OF 5

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs (2)	BPS1-TT-MW306S- 01232012	BPS1-TT-MW306I- 01232012	BPS1-TT-MW306D- 01232012	BPS1-TT-MW307S- 01182012	BPS1-TT-MW307I- 01182012	BPS1-TT-MW307D- 01182012	BPS1-TT-MW308S- 01162012	BPS1-TT-MW308I- 01162012	BPS1-TT-MW308D- 01162012
Sample Date				1/23/2012	1/23/2012	1/23/2012	1/18/2012	1/18/2012	1/18/2012	1/16/2012	1/16/2012	1/16/2012
Sample Interval (feet bgs)				50-60	189-199	284-294	40.5-50.5	188-198	276-286	54-64	156-166	250-260
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U								
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U								
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	0.5 U	0.5 U	0.24 J	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U								
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.19 J							
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U								
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U				
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U								
TETRACHLOROETHENE	127-18-4	5	5	0.4 J	0.5 U	0.44 J	1.3	1.1	0.5 U	0.5 U	0.5 U	0.7 J
TOLUENE	108-88-3	1000	5	0.1 U								
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U								
TRICHLOROETHENE	79-01-6	5	5	0.5 U	0.54 J	2.4	0.57 J	1.8	0.5 U	0.71 J	0.5 U	1.6
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U								
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.61 J	0.08 U	0.08 U	0.56	0.08 U	0.52	0.073 J
AROCLOR-1248	12672-29-6	0.5	0.5	0.54	1.8	0.08 U	0.08 U	0.84	0.08 U	0.2	0.08 U	0.08 U
Metals (μg/L)												
CALCIUM	7440-70 -2	NE	NE									
CHROMIUM	7440-47-3	100	100	1.3	2.3	1.2	4	12	13	10	10	17
IRON	7439-89-6	NE	300	310	93	77	530	460	460	150	240	240
SODIUM	82115-62-6	NE	NE									
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³	1 U	1 U			1 U				
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100									
IRON	7439-89-6	NE	300									
Miscellaneous (μg/L)												
TOTAL ORGANIC CARBON		NE	NE	710 J	3300	1100						

Notes: MCL = Maximum Contaminant Level NYSDOH = New York State Department of Health

bgs = below ground surface

μg/L = micrograms per liter

U = Non Detect

J = Estimated Value Blank cell = No sample

NE = Not Established

Bolded value indicates exceedance of Federal or NYSDOH MCLs ¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at

http://www.epa.gov/safewater/contaminants/index.html#primary

² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level
Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at

http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm

There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3 ANALYTICAL DETECTIONS MONITORING WELLS SITE 1 - FORMER DRUM MARSHALLING AREA NWIRP BETHPAGE, NEW YORK PAGE 5 OF 5

			MADON			l
	CAS No.	Federal MCLs ⁽¹⁾	MCLs (2)	BPS1-TT-MW309S- 01102012	BPS1-TT-MW309I- 01112012	BPS1-TT-MW309D- 01112012
Sample Date				1/10/2012	1/11/2012	1/11/2012
Sample Interval (feet bgs)				53-63	160-170	252-262
Volatile Organic Compounds(µg/L)						
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.45 J
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	0.5 U	0.27 J
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	0.5 U	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.5 U	0.5 U	1.1
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.61 J	0.5 U	1.8
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U
Polychlorinated Biphenyls (µg/L)						
AROCLOR-1242	53469-21-9	0.5	0.5	0.086 U	0.43	0.085 U
AROCLOR-1248	12672-29-6	0.5	0.5	1	0.08 U	0.085 U
Metals (µg/L)						
CALCIUM	7440-70 -2	NE	NE			
CHROMIUM	7440-47-3	100	100	18	49	7.5
IRON	7439-89-6	NE	300	2100	130	2400
SODIUM	82115-62-6	NE	NE			
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³	8.9 J	47.7	1 U
Filtered Metals (µg/L)		•	-			
CHROMIUM	7440-47-3	100	100	13		0.56 J
IRON	7439-89-6	NE	300	92		31
Miscellaneous (µg/L)						
TOTAL ORGANIC CARBON		NE	NE			

Notes: MCL = Maximum Contaminant Level NYSDOH = New York State Department of Health

bgs = below ground surface

μg/L = micrograms per liter U = Non Detect

J = Estimated Value

Blank cell = No sample

NE = Not Established

Bolded value indicates exceedance of Federal or NYSDOH MCLs ¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at

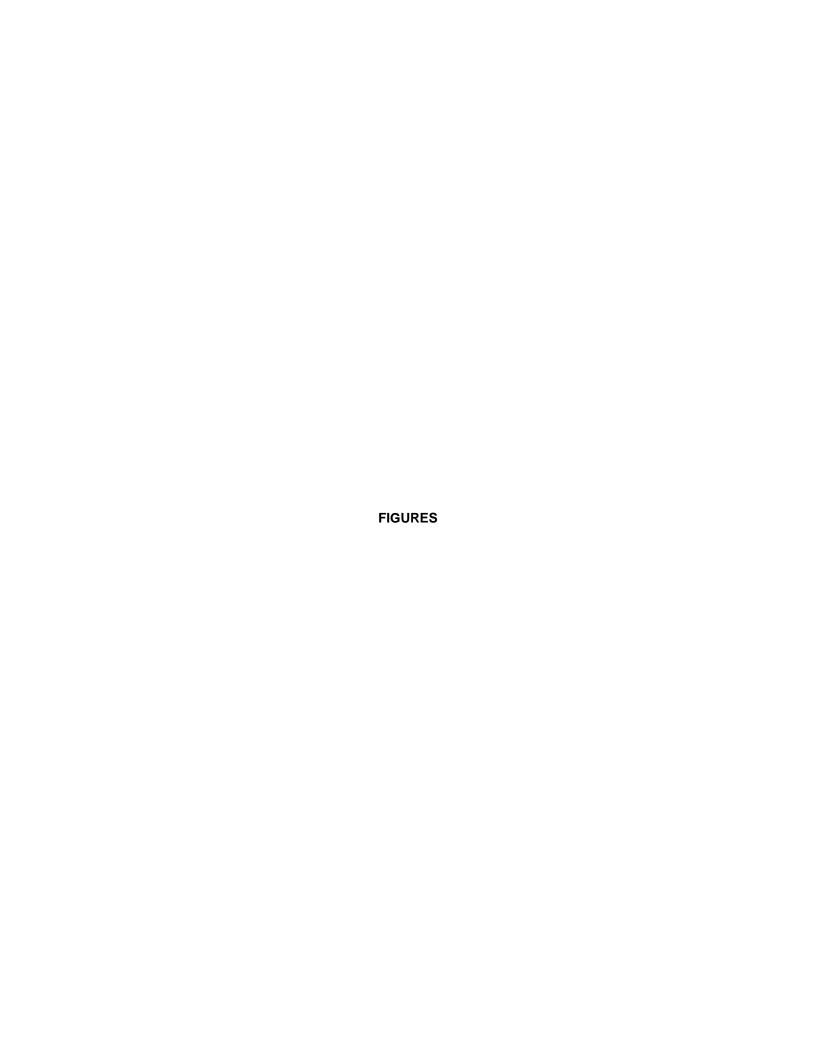
http://www.epa.gov/safewater/contaminants/index.html#primary

² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level
Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at

http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm

There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.







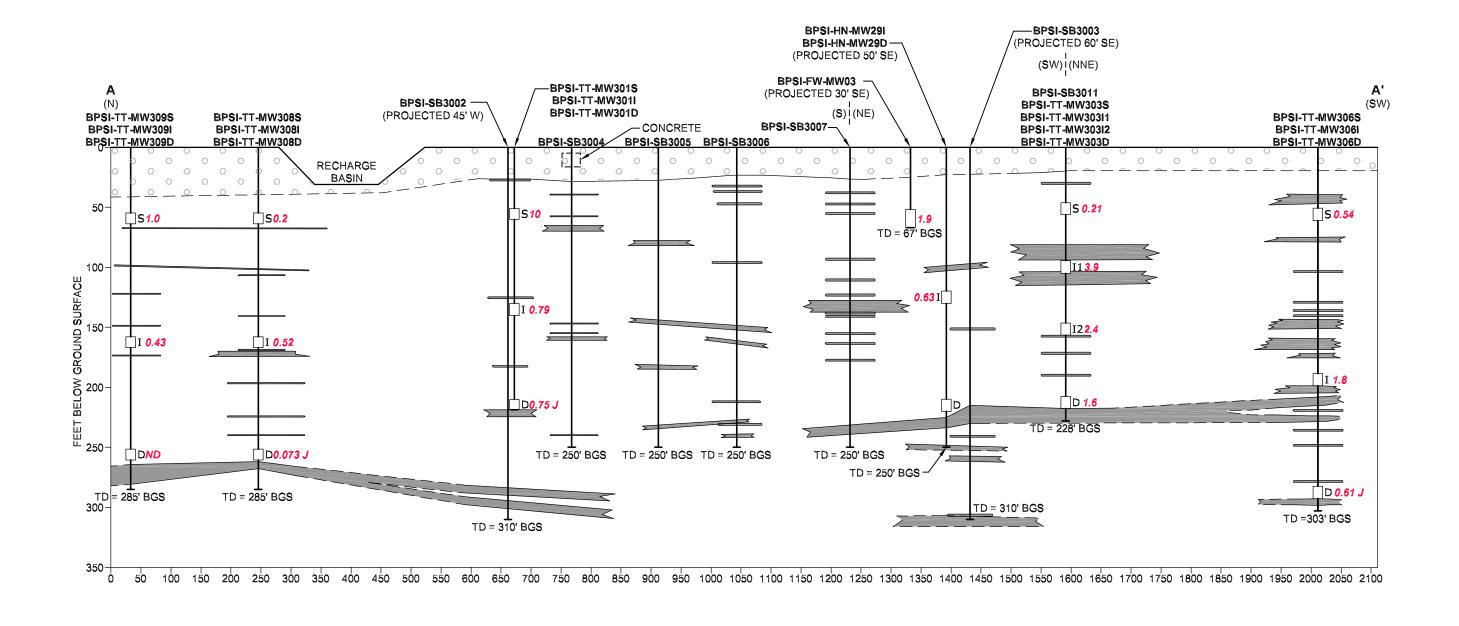


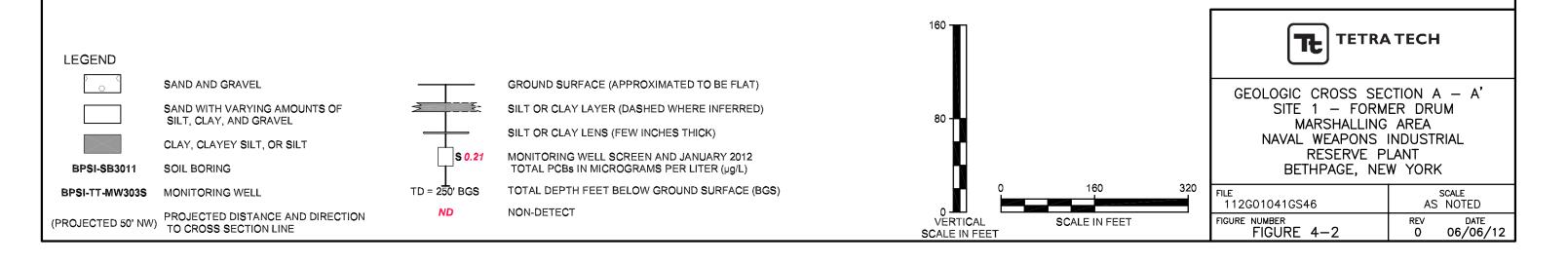


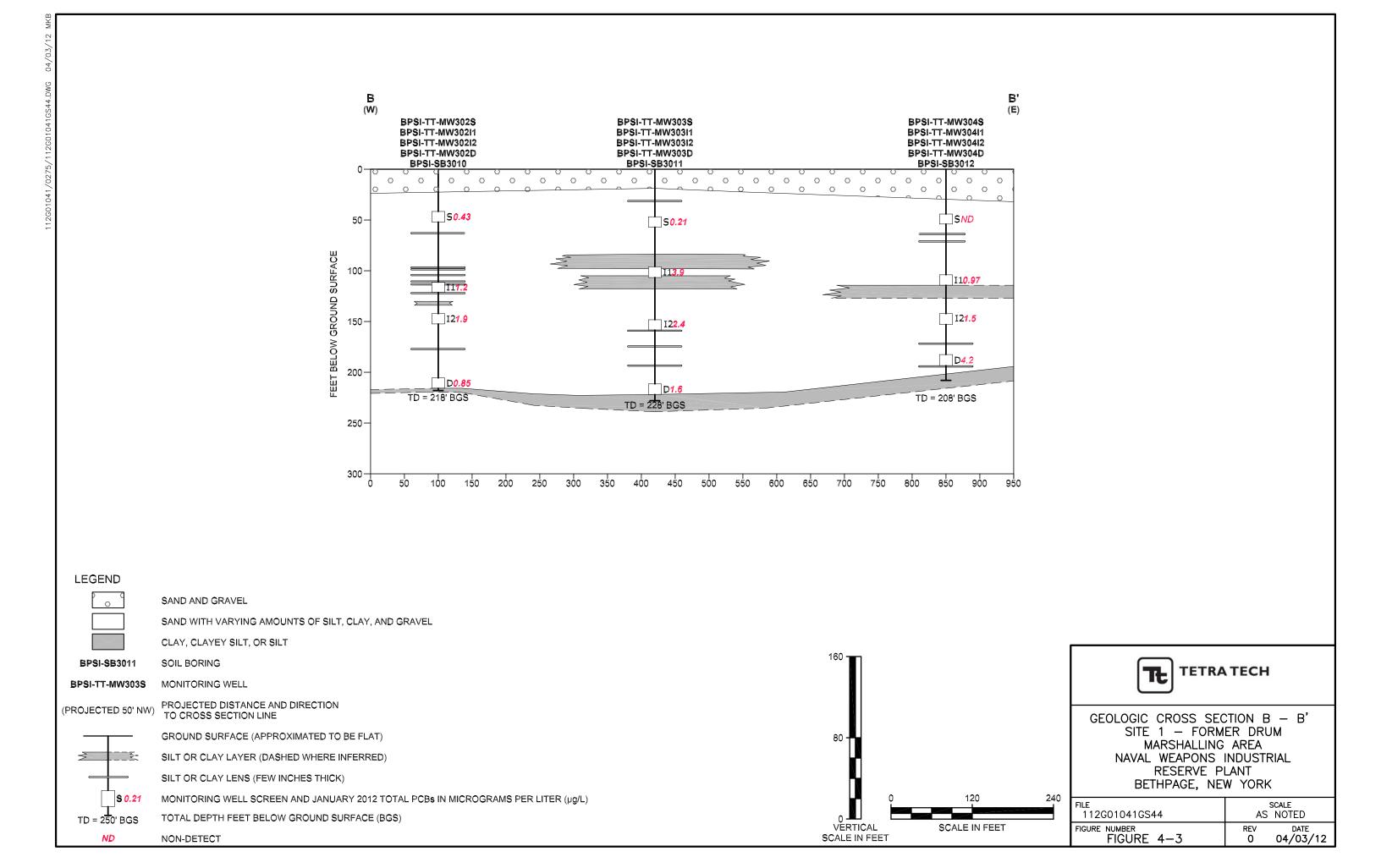


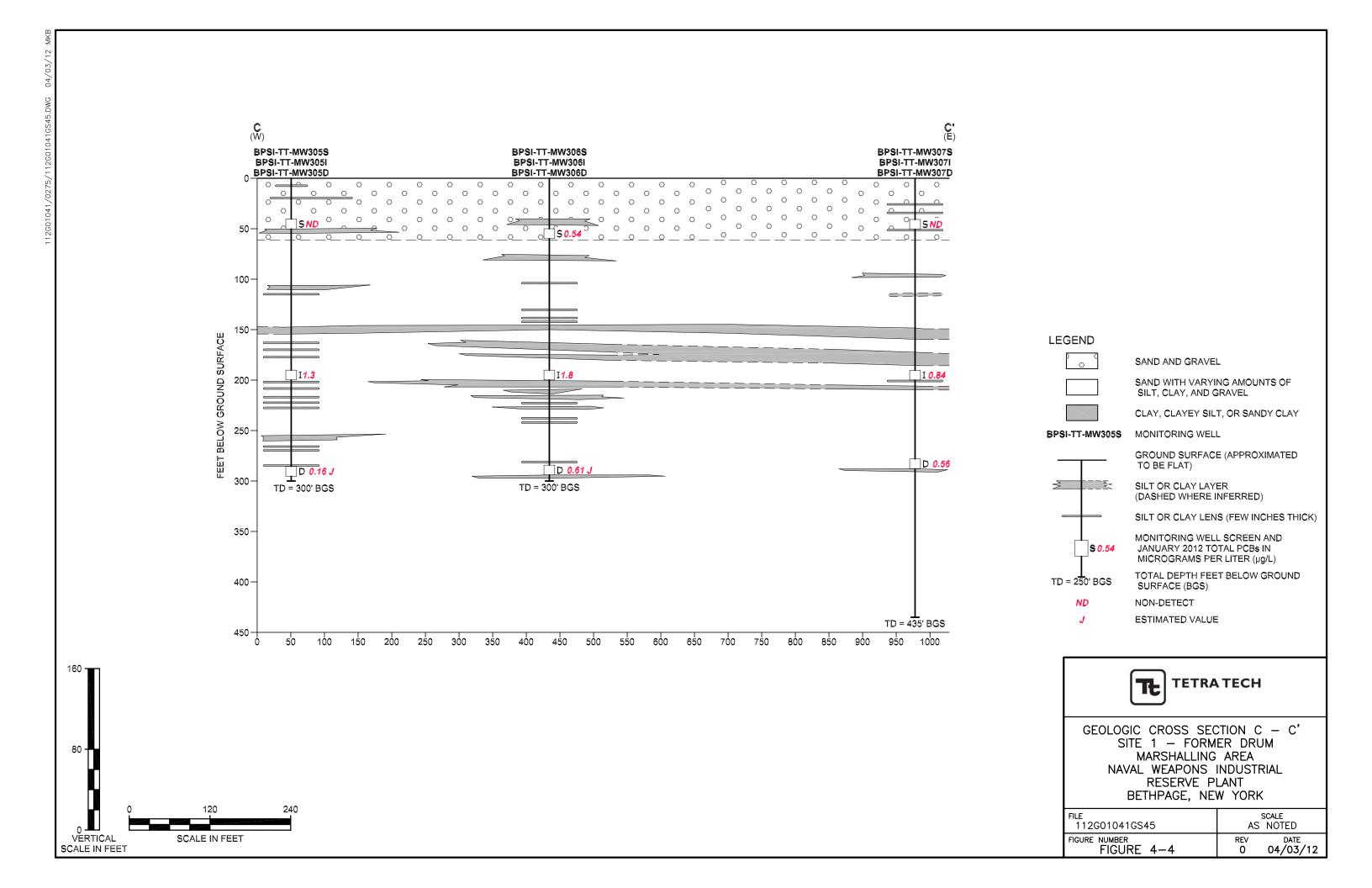


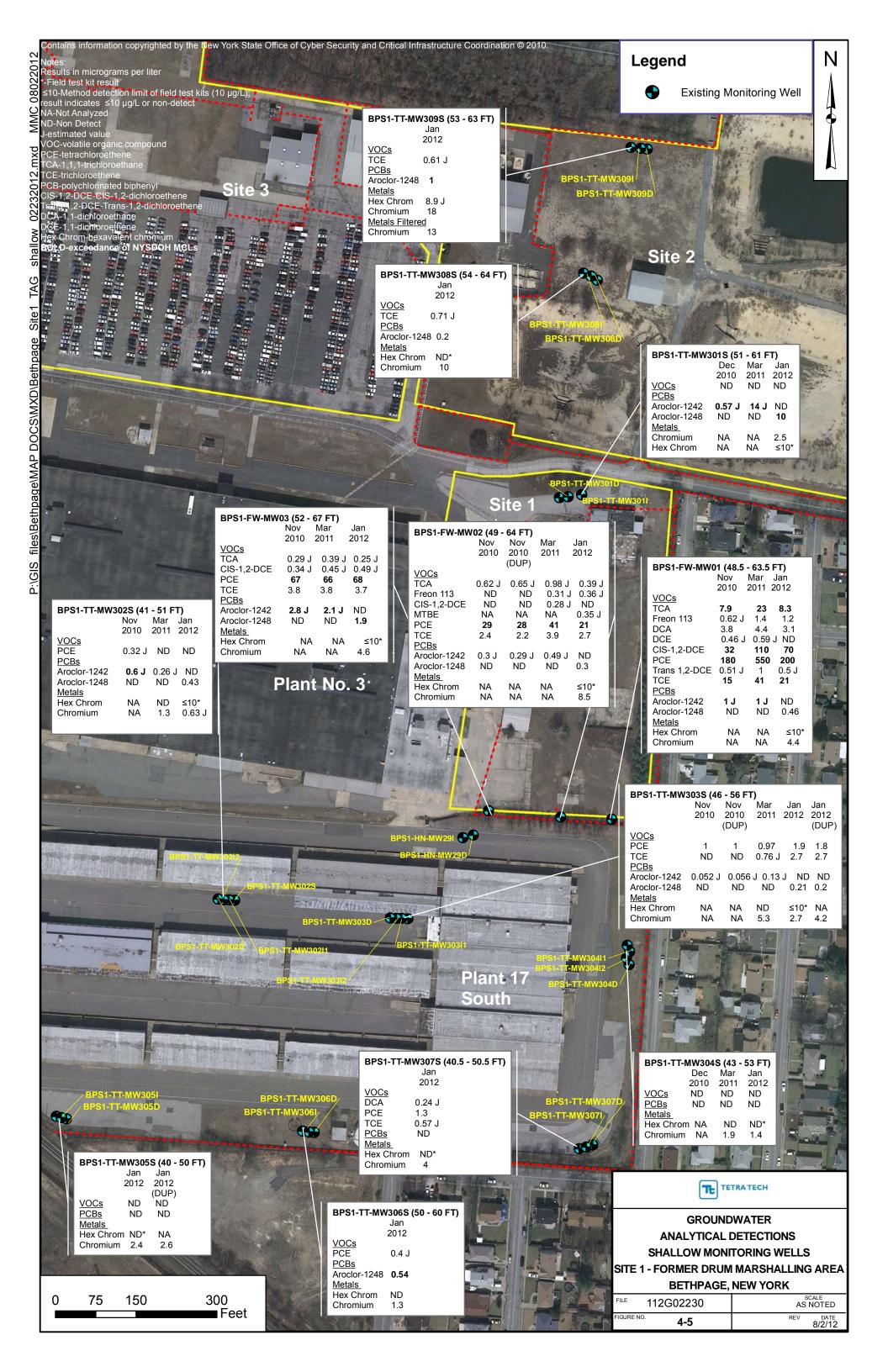


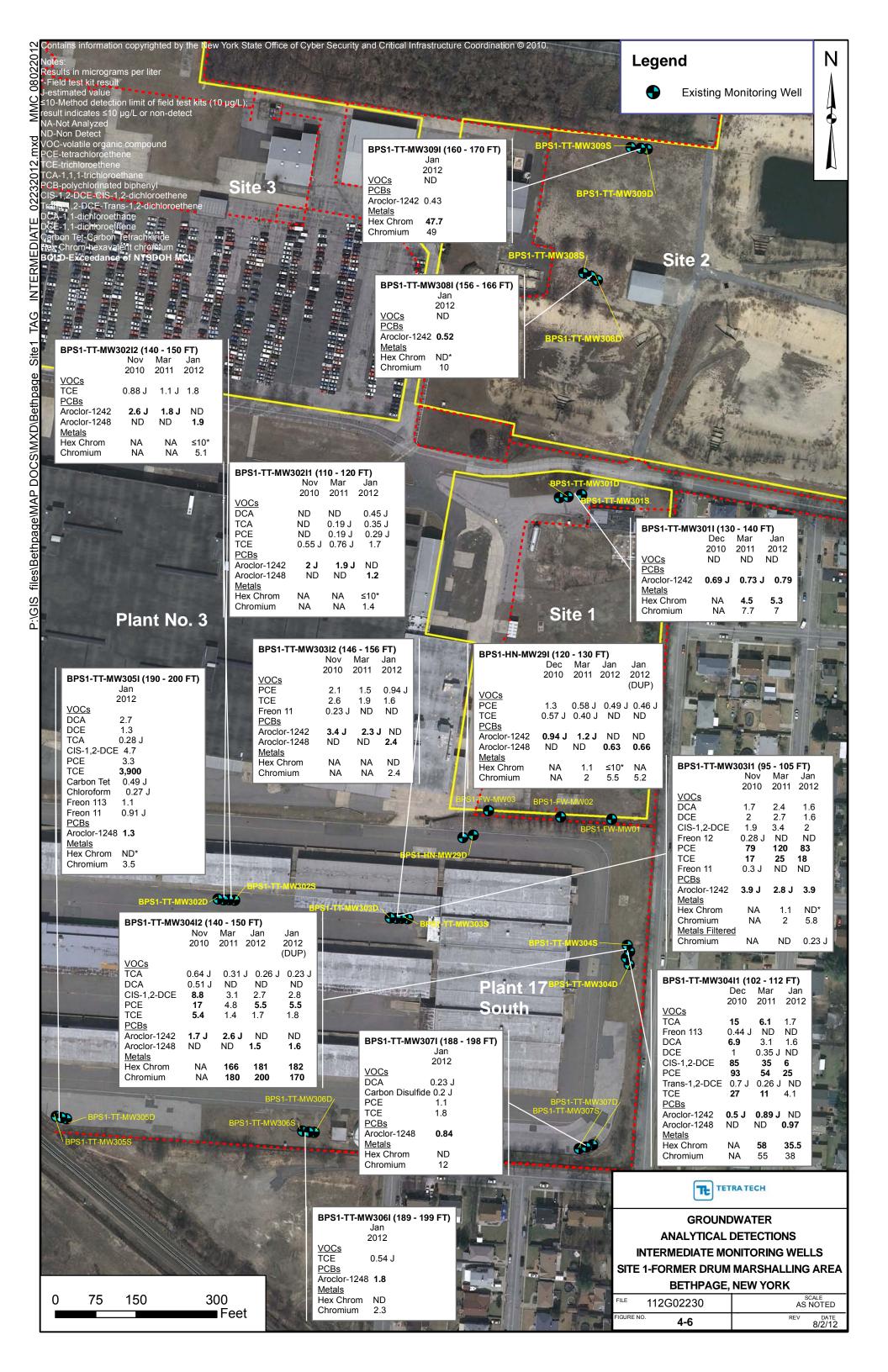


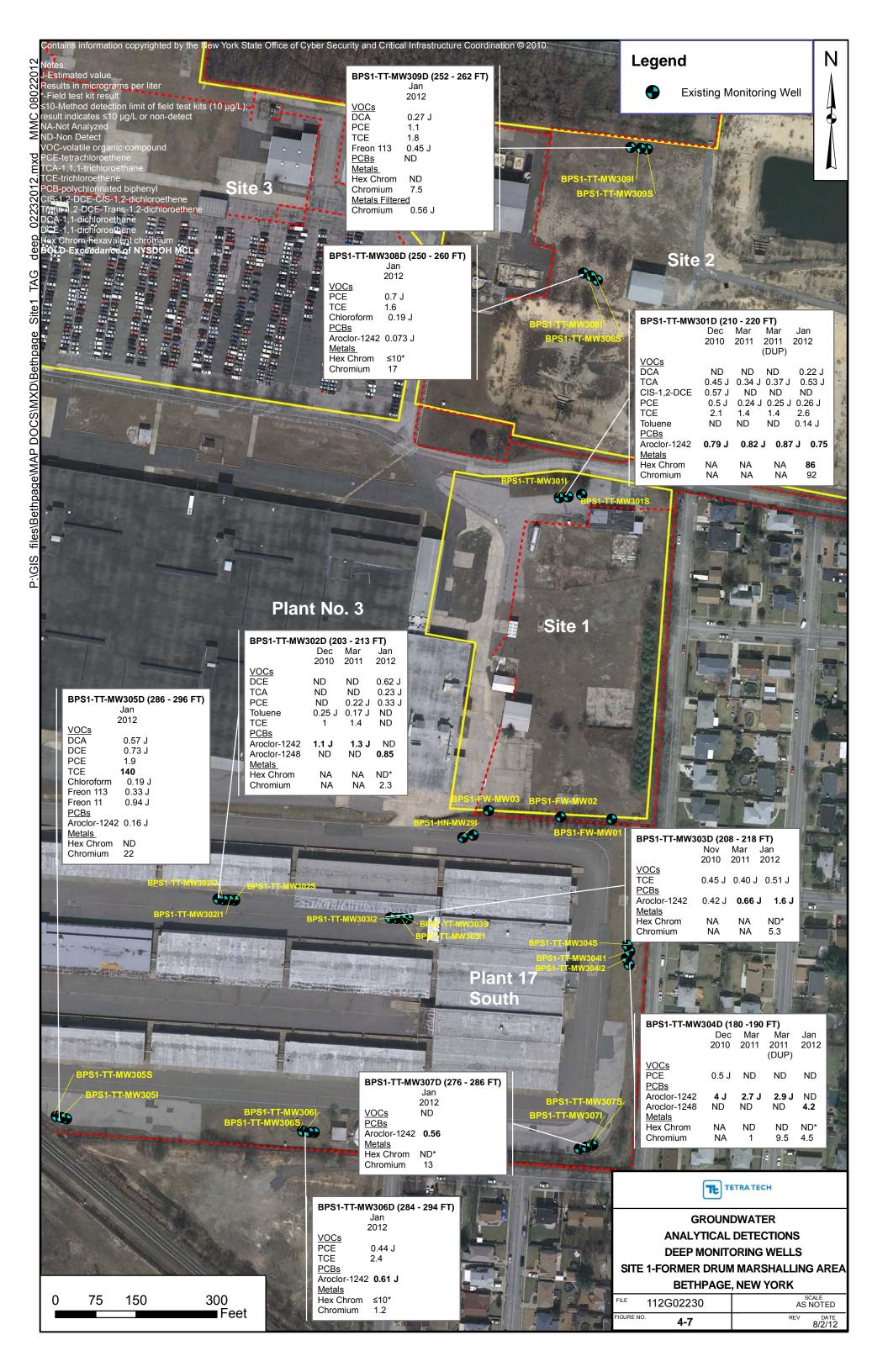








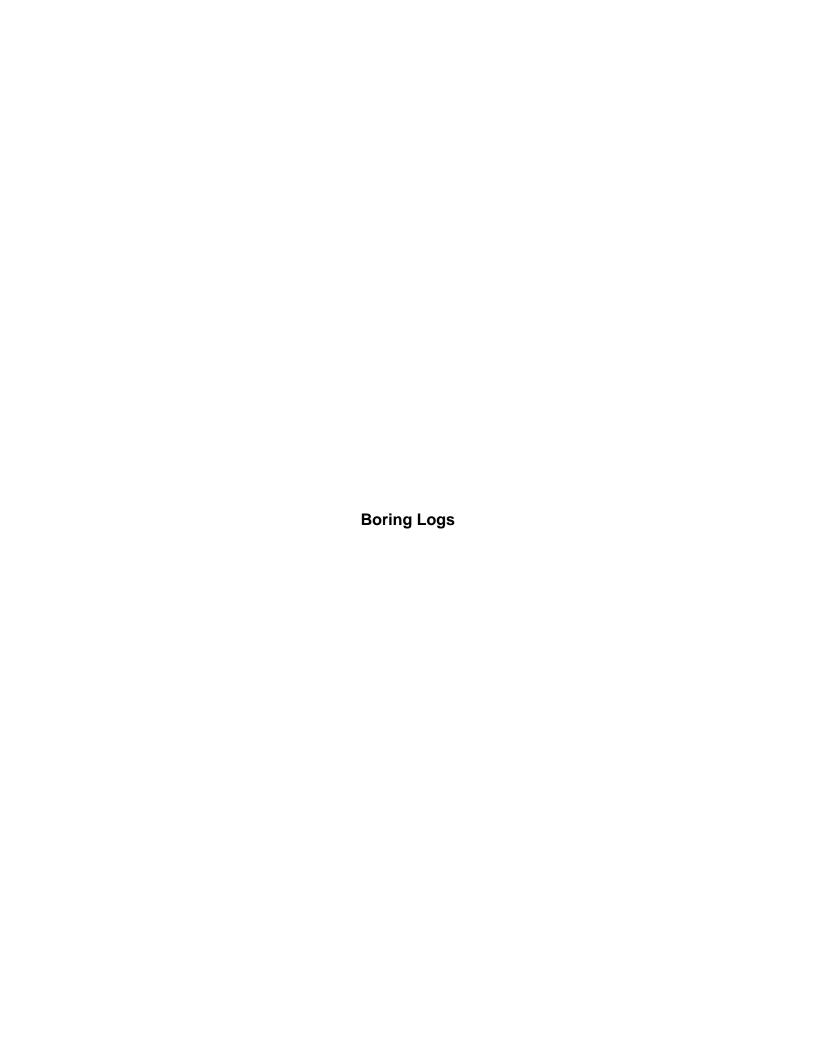






Appendix A

Field Forms, Logsheets, and Documentation





BORING LOG

Page _1__ of _12__

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW305
PROJECT NUMBER:	112G02230	DATE:	11/12/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / Hollow Stem Auger	DRILLER:	B. Murphy / K. Cronin

					MATERIAL DESCRIPTION				PID/FIC	Read	ding (ppm)	
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2						trace-little, med. Gravel,moist.	SM	Set 8" ID steel surface				
	2-3						,		casing to 25'				
	3-4								(Gueci - Failing F10)				
	4-5												
S-2	5-6					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7						trace-little, med. Gravel,moist.	SM					
	7-8												
	8-9												
	9-10												
S-3	10-11					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12						little- med. to coarse gravel.	SM/ ML					
	12-13						(11'-12' silt)		Geophysical log.				
	13-14						moist						
	14-15												
S-4	15-16					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17						little- med. to coarse gravel.	SM					
	17-18						moist						
	18-19												
	19-20												
S-5	20-21					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22						little- med. to coarse gravel.	SM				L	
	22-23						moist					L	
	23-24								Lost +/- 200 gals. Drill-				
	24-25								mud between 25'-48'.			L	

When rock coring, enter rock brokeness.	
---	--

** Include monitor read	ding in 6 foot interv	als @ borehole	. Increase rea	ading frequency if elev	rated reponse read.	Drilling Area	
Remarks:	Set 8" I.D. Sch.	40 steel surfa	surface.	Background (ppm):	0		
	12" ID HAS bor	ehole to 25' B	entonite at base. Soil backfill a	above.			
0 1 (- 1)	II	Yes		No	M-11.1.D. // D	DO4 TT MM/005	
Converted to W	eii:	Well I.D. #: B	PS1-TT-MW305				



DRILLING COMPANY:

DRILLING RIG:

Tetra Tech NUS, Inc.

BORING LOG

Page <u>2</u> of <u>12</u>

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW305
PROJECT NUMBER: 112G02230 DATE: 10/15/2011

Delta Drilling

DATE: 10/15/2011
GEOLOGIST: J. Ferguson

Mud Rotary / Hollow Stem Auger DRILLER: B. Murphy / K. Cronin

					N	1ATEI	RIAL DESCRIPTION		Р	ID/FID	Reac	ling (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-6	25-26					Tan- Lt. brn	Fine to coarse sand and	SM/ GM	Screened mud rotary	0	0	0	0
	26-27			 			fine to coarse gravel, moist.	SM/ GM	cuttings.				
	27-28								Lost +/- 200 gals. Drill-				
	28-29								mud between 25'-48'.				
	29-30												
S-7	30-31					Tan- Lt. brn	Silty, medium-coarse sand,	SM/ GM	Screened mud rotary	0	0	0	0
	31-32						little- med. to coarse gravel.	SM/ GM	cuttings.				
	32-33						moist	ML	Geophysical log.				
	33-34							ML	Geophysical log.				
	34-35							ML	Geophysical log.				
S-8	35-36					Tan- Lt. brn	Silty, medium-coarse sand,	SM/ GM	Screened mud rotary	0	0	0	0
	36-37			燹			little- med. to coarse gravel.	SM/ GM	cuttings.				
	37-38						moist						
	38-39												
	39-40												
S-9	40-41			XXX		Light brn	Silty, medium-coarse sand,	SM/ GM	Screened mud rotary	0	0	0	0
	41-42						little- med. to coarse gravel.	SM/ GM	cuttings.				
	42-43						moist						
	43-44			1									
	44-45												
S-10	45-46					Tan	Fine-coarse sand,	sw	Screened mud rotary	0	0	0	0
	46-47						little- med. to coarse gravel.	sw	cuttings.				
	47-48						moist						
S-11*	48-49	10-22			Dense	Tan to	Silty, medium-coarse sand, wet.	sm sc	Split spoon sample	0	0	0	0
	49-50	21-20				Org brn	trace fc. gravel, clay laminae	sm sc	10:40				

s.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.	Drilling Area
Remarks:	Background (ppm): 0

Converted to Well:	Yes	X	No	Well I.D. #: <u>BPS1-TT-MW-305</u>



DRILLING COMPANY:

Tetra Tech NUS, Inc.

BORING LOG

Page <u>3</u> of <u>12</u>

PROJECT NAME: Site 1 - PCB Investigation E
PROJECT NUMBER: 112G02230 E

112G02230 Delta Drilling

DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305

DATE: 11/15/2011
GEOLOGIST: J. Ferguson

DRILLER: B. Murphy / K. Cronin

					MATERIAL DE		RIAL DESCRIPTION		P		PID/FID Reading (
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length		Soil Density/ Consistency		U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**	
S-12	50-51					Light brn	Sandy (very fine to fine) silt.	ML	Screened mud rotary	0	0	0	0
	51-52						Silt (Geophysical log)	ML	cuttings and geo-				
	52-53						Silt (Geophysical log)	ML					
	53-54						Silt (Geophysical log)	ML					
	54-55						Silt (Geophysical log)	ML					
S-13	55-56					Tan- Lt. brn	Fine to coarse sand and	SP	Screened mud rotary	0	0	0	0
	56-57						fine to coarse gravel, moist.	SP	cuttings.				
	57-58												
S-14*	58-59	16-21			Dense	Gray- white	Micaceous, medium to coarse	SP	Split spoon sample.	0	0	0	0
	59-60	23-24				Gray- white	sand, wet.	SP	11:10				
	60-61												
	61-62												
	62-63												
	63-64												
	64-65												
S-15	65-66					Tan - brn	Micaceous, fine to coarse sand,	SP	Screened mud rotary	0	0	0	0
	66-67						little silt, wet.	SP	cuttings.				
	67-68								Ŭ				
	68-69												
	69-70			1									
S-16	70-71					Tan - brn	Micaceous, fine to coarse sand	SM	Screened mud rotary	0	0	0	0
	71-72						with silt laminae, wet.	SM	cuttings.				
	72-73								Ţ.				
	73-74			1									
	74-75												

** Include monitor reading in 6 foot		ed reponse read.	Drilling Area						
Remarks:	Backgro								
Converted to Well:	Yes	X	No _	Well I.D. #	BPS1-TT-MW-305				



BORING LOG

Page <u>4</u> of <u>12</u>

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW305

PROJECT NUMBER: 112G02230 DATE: 11/15/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLING RIG: Mud Rotary / Hollow Stem Auger DRILLER: B. Murphy / K. Cronin

					I	IATEI	RIAL DESCRIPTION		P	ID/FID	Read	ling (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks		Sampler BZ	Borehole**	Driller BZ**
S-17	75-76					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	76-77						sand with silt laminae, trace to	SM	cuttings.				
	77-78						little lignite						
	78-79												
	79-80												
S-18	80-81					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	81-82						sand with silt laminae, trace to	SM	cuttings.				
	82-83						little lignite						
	83-84												
	84-85												
S-19	85-86					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	86-87						sand with silt laminae, trace to	SM	cuttings.				
	87-88						little lignite						
	88-89												
	89-90												
S-20	90-91					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	91-92						sand with silt laminae, trace to	SM	cuttings.				
	92-93						little lignite						
	93-94												
	94-95												
	95-96												
	96-97												
	97-98												
	98-99												
	99-100												

^{*} When rock coring, enter rock brokeness.

* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.	Drilling Area_	
Remarks:	Background (ppm):	0



BORING LOG

Page <u>5</u> of <u>12</u>

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling

Delta Drilling
Mud Rotary / Hollow Stem Auger

DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305

DATE: 11/15/2011
GEOLOGIST: J. Ferguson

DRILLER: B. Murphy / K. Cronin

					N	IATE	RIAL DESCRIPTION			PID/FI	Rea	ding (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-21	100-101					Tan - Org. brn	Silty, fine to medium sand	ML/ SM	Screened mud rotary	0	0	0	0
	101-102						with silt laminae, trace to	ML/ SM	cuttings.				
	102-103						little lignite						
	103-104												
	104-105												
	105-106												
	106-107						Sandy silt.	ML	Geophysical log.				
	107-108						Sandy silt.	ML					
	108-109												
	109-110												
S-22	110-111					Tan - Org. brn	Silty, micaceous, fine to coarse	ML/ SM	Screened mud rotary	0	0	0	0
	111-112						sand with silt laminae.	ML/ SM	cuttings.				
	112-113						Silt and sandy silt.	ML/ SM	Geophysical log.				
	113-114												
	114-115												
	115-116												
	116-117												
	117-118												
	118-119												
	119-120			\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:									
S-23	120-121					Tan - Org. brn	Silty, micaceous, medium to coars	SM	Screened mud rotary	0	0	0	0
	121-122						sand with silt laminae, trace to	SM	cuttings.				
	122-123						little lignite						
	123-124												
	124-125												

* Whe	en rock	coring,	enter	rock	brokeness.	
-------	---------	---------	-------	------	------------	--

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated repo	nse read. Drilling Area
Remarks:	Background (ppm): 0

Converted to Well:	Yes	Χ	No	Well I.D. #: BPS1-TT-MW-305



BORING LOG

Page	6	of	_12

					N	1ATEI	RIAL DESCRIPTION		P	ID/FID	Read	ding (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / Sample 6" or Recovery RQD / Sample Length		Lithology Change (Depth/Ft.) or Screened Interval		Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	125-126												
	126-127												
	127-128												
	128-129												
	129-130												
S-24	130-131					Tan - Org. brn	Silty, micaceous, medium to coarse	SM	Screened mud rotary	0	0	0	0
	131-132						sand with silt laminae, trace to	SM	cuttings.				
	132-133						little lignite						
	133-134												
	134-135												
	135-136												
	136-137												
	137-138												
S-25*	138-139	25-28			Very Dense	Tan - Red brn	Silty, micaceous, medium to coarse	SM	Split spoon sample.	0	0	0	0
	139-140	31-33					sand w/ silt laminae, trace f. gravel.	SM	13:15				
	140-141												
	141-142												
	142-143												
	143-144												
	144-145												
	145-146												
	146-147						Sandy silt.		Geophysical log.				
	147-148												
S-26*	148-149	10-12				Tan - Gray	Sandy (fine), clay.	CL	Split spoon sample.	0	0	0	0
	149-150	15-20				Tan - Gray		CL	13:35				

* When rock coring, enter	rock brokeness.					
** Include monitor reading	in 6 foot intervals @ borehole	. Increase	reading frequency if ele	vated reponse read.	Drilling Area	
Remarks:					Background (ppm):	<u> </u>
				_		
Converted to Well:	Yes	Χ	No	Well I.D. #: [BPS1-TT-MW-305	



Page _7_ of _12_

					N	1ATEI	RIAL DESCRIPTION		F	ID/FID	Read	ling (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151					Gray	Sandy, clay	CL	Geophysical log and				
	151-152							CL	mud rotary return.				
	152-153							CL					
	153-154							CL					
	154-155												
	155-156												
	156-157												
	157-158												
	158-159												
	159-160												
S-27	160-161					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	161-162						sand with silt laminae, tr.lignite.	SM	cuttings.				
	162-163												
	163-164												
	164-165						Silt (geophysical log)	ML					
	165-166												
	166-167												
	167-168												
	168-169						Silt (geophysical log)	ML					
	169-170						Silt (geophysical log)	ML					
S-28	170-171					Gray	Silty, micaceous, sandy silt and	ML/ SM	Screened mud rotary	0	0	0	0
	171-172						silty, very fine to fine sand.	ML/ SM	cuttings.				
	172-173								11/15/2011 Stopped				
	173-174								@ 173'.				
	174-175												

* When rock coring, enter	r rock brokeness.				
** Include monitor readin	g in 6 foot intervals @ borehole.	Increase read	ding frequency if	f elevated reponse read.	Drilling Area
Remarks:					Background (ppm): 0
_				<u>-</u>	
_					
Converted to We	ll: Yes	Χ	No	Well I.D. #: B	PS1-TT-MW-305



BORING LOG

Page	8	of	12

				IV	1ATEI	RIAL DESCRIPTION			PID/FII) Read	ding (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176							11/16/2011 started				
	176-177							drilling from 173'.				
	177-178											
	178-179											
	179-180											
S-29	180-181				Gray	Silty, micaceous, sandy silt and	ML/ SM	Screened mud rotary	0	0	0	0
	181-182					silty, very fine to fine sand.	ML/ SM	cuttings.				
	182-183											
	183-184											
	184-185											
	185-186											
	186-187											
	187-188											
	188-189											
	189-190											
S-30	190-191				Gray	Silty, micaceous, sandy silt and	ML/ SM	Screened mud rotary	0	0	0	0
	191-192					silty, very fine to fine sand.	ML/ SM	cuttings.				
	192-193											
	193-194											
	194-195											\bigsqcup
	195-196											
	196-197											
	197-198											
	198-199											
	199-200											

When rock coring, enter rock brok	eness.					
** Include monitor reading in 6 foot	intervals @ boreho	ole. Increase r	eading frequency if elev	rated reponse read.	Drilling Area_	
Remarks:					Background (ppm):	0
Converted to Well:	Yes	Χ	No	Well I.D. #:	BPS1-TT-MW-305	



BORING LOG

Page	9	of	12

					M	1ATEI	RIAL DESCRIPTION		F	ID/FIE	Read	ding (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-31	200-201					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	201-202						sand with silt laminae, tr.lignite.	SM	cuttings.				
	202-203												
	203-204												
	204-205												
	205-206												
	206-207												
	207-208												
	208-209												
	209-210												
S-32	210-211					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	211-212						sand with silt laminae, tr. lignite.	SM	cuttings.				
	212-213												
	213-214												
	214-215												
	215-216												
	216-217						Silt (geophysical log)	ML					
S-33	217-218					Dark brn	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	218-219					Dark brn	little to some silt, oxidized, wet.	SM GM	cuttings.				
	219-220												
	220-221												
	221-222												
	222-223												
	223-224												
	224-225						Silt (geophysical log)						

		1///		e (geop.i.) e.e	su. 10g)			
When rock coring, en	ter rock broken	ness.						•
** Include monitor read	ing in 6 foot into	ervals @ boreho	le. Increase r	reading frequency if elev	/ated reponse read.		Drilling Area	
Remarks:						Ba	ckground (ppm):	0
<u> </u>							,	•
_								
Converted to W	ell:	Yes	Х	No	Well I.D). #: BPS1-TT-N	MW-305	



BORING LOG

Page	10	of	12

					IV	MATERIAL DESCRIPTION			F	ID/FID	Read	ling (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-34	225-226					Tan - Gray	Silty, very fine to fine sand	SM	Screened mud rotary	0	0	0	0
	226-227						trace to little silt laminae.	SM	cuttings.				
	227-228						Silt (geophysical log)	ML					
	228-229						Silt (geophysical log)	ML					
	229-230												
	230-231												
	231-232												
	232-233												
	233-234												
	234-235												
	235-236												
	236-237												
	237-238												
	238-239												
	239-240												
S-35	240-241					Dark brn to	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	241-242					Org brn	little to some silt, oxidized, wet.	SM GM	cuttings.				
	242-243			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
	243-244												
	244-245												
	245-246									ĺ			П
	246-247												
	247-248												
	248-249												
	249-250												П

When rock coring, enter rock brokeness.	

** Include monitor reading in 6 foot	intervals @ boreh	ole. Increase re	eading frequency if ele	vated reponse read.	Drilling Area	
Remarks:					Background (ppm):	0
Converted to Well:	Yes	X	No	Well I.D. #:	BPS1-TT-MW-305	



BORING LOG

Page	11	of	12

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW305

PROJECT NUMBER: 112G02230 DATE: 11/16/2011

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLING RIG: Mud Rotary / Hollow Stem Auger DRILLER: B. Murphy / K. Cronin

					N	1ATEI	RIAL DESCRIPTION		F	ID/FID	Read	ling (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-36	250-251					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	251-252					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	252-253												
	253-254												
	254-255						Silt (geophysical log)	ML					
	255-256						Sandy (fine) clay.	CL/ SC	Geophysical log.				
	256-257							CL					
	257-258							CL					
	258-259							CL					
	259-260							CL					
	260-261												
	261-262												
S-37	262-263					Tan - Gray	Silty, micaceous fine sand and	Sm Ml	Screened mud rotary	0	0	0	0
	263-264					Tan - Gray	sandy (fine), silt.	Sm Ml	cuttings.				
	264-265			**************									
	265-266												
	266-267												
	267-268												
	268-269												
	269-270												
	270-271												
	271-272												
	272-273												
S-38	273-274	18-23				Tan- brn	Silty fine to medium quartzose	SM	Mud rotary cuttings	0	0	0	0
	274-275	24-27				Tan- brn	sand.	SM					

^{*} When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Installed 2" ID Sch 40 PVC Well Screen from 286' to 296'.

Drilling Area
Background (ppm): 0

#1 Silica sandpack from 271' to 300'.

4' Bentonite pellet seal 244' to 268'. Cetco bentonite/portland cement annular seal to 10' BGS.

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW-305

Page <u>12</u> of <u>12</u>

					N	1ATEI	RIAL DESCRIPTION		F	ID/FID	Read	ling (ı	ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-39	275-276					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	276-277					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	277-278												
	278-279												
	279-280												
	280-281												
	281-282												
	282-283												
	283-284												
	284-285												
	285-286												
	286-287						Silt (geophysical log)	ML					
	287-288						Silt (geophysical log)	ML					
S-40*	288-289	18-24				Tan- Gray	Silty, very fine to fine sand.	SP SM	Split spoon sample.	0	0	0	0
	289-290	26-30							12:45				
	290-291												
	291-292												
	292-293												
	293-294												
	294-295												
	295-296												
	296-297												
	297-298												
S-41*	298-299	24-25				Tan- Org Brn.	Silty, very fine to fine sand.	SP SM	Split spoon sample.	0	0	0	0
	299-300	30-27					13:15	SP SM	Bottom of boring=300'.				

* When rock coring	, enter rock	brokeness.
--------------------	--------------	------------

** Include monitor re	ading in 6 foot	intervals @ boreh	ole. Increase r	eading frequency if e	elevated reponse read.	Drilling Area
Remarks:	Set 2" ID v	Background (ppm): 0				
Converted to '	Well:	Yes	Χ	No	Well I.D. #:	BPS1-TT-MW305

Tŧ	Tetra	Tech NUS, Inc	
----	-------	---------------	--

. 4.	DRIL DRIL	LING LING	COMF	PANY:	1126	ethpac to 22.	<u>50</u>		GEOLOGI DRILLER:	IST:	MW-3067 11-28-11 Vince Shi Bill Mor	ck obv	ъГ.	4
						N	IATEI	RIAL DESCRIP	TION			PID/FII) Rea	ding (pp
	Sample No. and Type or RQD	(Ft.) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval		Color			×	Remarks	Sample	Sampler BZ	Borehole**
		i						<u> </u>						
		2	$\overline{}$											
		3												
		4							-					
		5												
		6												
		7												
		8												
		9												
		Įο												
, en .		1/												
teres t		12												
		13												
		14		ļ								<u> </u>		
		15												
		16								-				
		17					1			<u> </u>				
		18		ļ						-		<u> </u>		
		19						11-23-11	or)			_		
1281		20		1			'	11-23 11						
128/11		21		1	8".					-		-		
· *	-	22		 	8 C25 125	**:		[
8925	-	23		ļ <u>.</u>	A		Ben	F-6 Sand	2 - d			-		_
כגרט		24		 	1		`	F-C Sond F Grand	- 1.44e 3.1+			0	0	0 7
	- Wher	rock c	oring, ent	er rock bro	okeness.				-		<u> </u>			
	** Inclu	ide mor	nitor readi	ing in 6 foo	t intervals			e reading frequency if			Drilli Background			<u> </u>
			_2"	<u>" M.J.</u> <u>X.Z.".</u> :	<u>- rofa</u> Stevale Yes	ry drit Si spi	13	<u>B' to 300</u> 0001 SUMPL NO	1365 15 27 50	Jed	al depths			

TŁ	Tetra	Tech N	IUS, Inc.
----	-------	--------	-----------

			NAIVIE NUME		W.ERP	Betho	20,00	BURING No.:	· –	MW-306V	2			
			COM		<u> </u>	6022 elta	<u>.50</u>	DATE: GEOLOGIST:	. –	11-28-11				
			RIG:	74411	P	tadrill		DRILLER:	•	V. Shicker B. Murph	<u>**</u>			
			1	ſ	125			RIAL DESCRIPTION	一					
Times	Sample No. and Type or RQD	(Ft.) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval		Color	S Material Classification S	3	Remarks	Sample	Sampler BZ	Borehole** up	Driller BZ**
هـــــــــــــــــــــــــــــــــــــ		26					Bon	F-CS216-With	+		ــــــــــــــــــــــــــــــــــــــ			
		27			·		0.72	F-CS21d-Witz F-MGRENET-LIHTE SIH	+		0	0	0	0
		z8							\dagger					
		29							I					
:		30							_		Ó	0	Θ	0
		31					6ca	F-/ Sand milite	_					
		<u>32</u>					Rel	F-CSON with F-M Grave 1.ttle S.H. Trace	+	***************************************				
	\vdash	<u>33</u> 34						mice	+				Н	
		<u>35</u>							_	materia	Ø	6	0	
		36							十			Ĭ	Ť	
	ç	37					org		T					
0930		38					B &							
	<u>,</u>	39						<u> </u>	_	***************************************				
		40						Same as above	4		0	0	စ	<u>0</u>
		<i>41</i>			v. e			(Maje)	_	API (10 API)		$\vdash \vdash$		
89,32		炒					org Br	(Trece)	+			$\vdash \vdash$		
		44			-		BOA	(clzy)	+	, , , , , , , , , , , , , , , , , , , ,	H			
		45					Gry Bra	Silt-little clay	\dagger		0	0	0	6
		46						and Grevel						
		47												
8946		48	13	وز			c?= .	F-M Sand- little	\bot					
	S-1	49	717	19"			Gry Brz	F-M Sand - little Gilt - Trace clay	+		0	0	0	0
0957	* When	SD rock o	oring, ente	27 er rock bro	keness.				丄		ව	ග	ව	0
		de mor	itor readir		t intervals (@ borehole. I	ncrease	reading frequency if elevated reponse read	d.	Drillin Background			_ <	9
	Conv	ertec	to We	: :	Yes			No Well I.D. #	 #:	~				_
							•							

			NAME NUME		1/2	1/260 2230			DATE:	o.: –	11-28-11				
			COM	PANY:	<u>D</u>	ے ابا کے			GEOLOGIS	ST: _	11-28-11 V.Shiken	4			
	DRIL	LING	RIG:		<u> </u>	Hedr	<u> </u>		DRILLER:		B. Murphy				
Tine	Sample No, and Type or RQD	(Ft.) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	RIAL DESCF	Classification	⊔ % C % *	Remarks	Sample Sample	Sampler BZ au	Borehole**	Driller 82**
Time 1010		51					87	F-M San	d-little				_		
1010		<i>5</i> 2					BIX	Jul CS FGrane	en little			0	0	0	0
		<u>53</u>	/										Ш		
		54						\	/						\square
		<u>55</u>					Bm	Some	as above			0	0	0	Ö
		56													
		<u>57</u>									MATA TAKEN				
1016	ジ ース	5B	137											\blacksquare	
	\vdash	59		19"			Bra	F-MSZ	d-Trace Silt					\blacksquare	_
1028	<u></u>	60	35 34	24"			T21		S.11-			0	Ø	0	의
1011		61													
	4	62												\dashv	
		63							(C Send)				13,4	\rightarrow	
	,	64					Brn	Ψ	<u> </u>					\blacksquare	
		65					Tz ₁	Same	es above			<u></u>	Ö	0	의
		66										<u></u>			\vdash
		67							ITPICE 1						
		68	/	-					(True (CS21)				\sqcup		
		<u>69</u>					Gr. 1874 1757	<u> </u>	(F Great)			_			\dashv
		740					Ten	Idne 25	dove			0	0	0	의
A.		71						The color	(2/2 _y)			_	H		\dashv
		72						1	w			_	H		
		73													
- 1,17	<u> </u>	74				<u> </u>	607 800 T21	V	. 1				_		
	*When	75	oring ent	er fock bro	keness		TZn	Same a	s above			0	9	9	0
		de mor	nitor readi	ng in 6 foc	t intervals (Dege	ncrease	e reading frequenc	ey if elevated reponse	ead.	Drillir Background			e	2
	Cony	/ertec	to We	ell:	Yes			No	Well I.D). #: _	÷				



BORING LOG NUTRP Baffing as BORING No.: Mile 306 (1)

			NUME		112	GO 22	35	<u>e</u>	DATE:	-	11-28-11				
			COM	PANY:		e1ta_			GEOLOGIS	ST:		!			
	DRIL	LING	RIG:		Per	tadri			DRILLER:		B. Murphy				_
Time	Sample No. and Type or RQD	(Ft.) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness		RIAL DESC	RIPTION Classification	U	Remarks		Sampler BZ	Borehole**	Driller BZ**
11/100	•	76			!		Çγ	F-MSd	d-nee						
		77		<u> </u>			TZI	F Grave	d-True sondend					0	7
														\dashv	\vdash
1057		78 79													\vdash
		80					Bra Ten	<u> </u>	<u>, </u>			$\overline{}$			
							Ten	->2me	es above			0	0	0	
		<u>84</u> 82							(41144)						
		83 83							(MICALLOUS)						
		84					<i>(2.m.</i>)								
		85					6ry 721 8m	5240	es above			0	0	O	
		86				1	1)[-	1					Ĭ		
		87			1										
		58			1				(MICOCOUS)						
	,	89					GIV		,						
1113		90					Gry Bra Ten	Some	es above			E	0	0	ð
1119		91						Í							
		92							Į.						
		93							(MICACROS)						
		94	./				Gry								
		95					Bin Ten	Sans	es above			0	0	0	0
		96													
		97													
1/23		98						1							
1215		99					Gry		,						
		100					Bin 7≥1	Same	is above			0	0	Ø	6
	** Inclu		nitor readi				Increas		ncy if elevated reponse	read.	Drillir Background)
	Con	verte	d to We	ell:	Yes			No	Well I.I						
										6-					

Page <u>5</u> of <u>13</u>

			NAME	Ξ: ,	NWIR	P Bet GO 22	<u>t, p.2</u>	Çe <u>o</u>	BORING N	o.: _	MW-306	<u>()</u>			
· .			NUME	BER:	1/2	GO 22	<u>3'0'</u>	<i>J</i>	DATE:	_	11-28-11				
			COME	PANY:	<u> </u>	<u>e1+a_</u>			GEOLOGIS	51: -	V. Shicker	4			_
	DKIL	LING	RIG:		Por	tadi, U			DRILLER:	-	B. Murph				
•	Sample No. and Type or RQD	(Ft.) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soli Density/ Consistency or Rock Hardness	Color	RIAL DESCI	Classification	U S C S *	Remarks	Sample Sample			Driller BZ**
Time	<u> </u>						Ben	F-M Sano	1- Trace E.H						
		101					ery Ten	C send a	1- Trace Sitt			0	စ	ၜ	<u>_</u>
		102							<i>(</i>			_		\dashv	\dashv
	┢	123 164						**************************************	(micaceous)						
		105					Gry Br Ter	.5,,,,	25 above			B	0	6	
		106					70.7	Solve.							\dashv
		107							(SILT)			ļ			
		108													
		109					Gry								
-		110					Bin	Some.	es above			0	6	0	0
]11										<u> </u>			
		1/2							£ :'44			<u> </u>			
	ļ	113							(little)						
	<u> </u>	114		<u> </u>			Gry	N N	,						
		115					Bón T21	Same 2	es chove.			0	0	0	0
		116							/ little			-			
	\vdash	117							(clay)			 			
1228	igg	118	-	 				<u> </u>							
1~'		119					6-ry BM 7≥1	F Sand-	little silt lay and			0	0	6	0
		121					121	C 520	ey ene					<u> </u>	Ħ
		122			1										
		123			1				(micaceous)						
		124					ويجو	•							
		125					BCA	Same	25 space			0	0	0	0
				er rock br gg in 6 fod		@ borehole.	Increas		ncy if elevated reponse	read.	Drillin				
*		arks:		,	pag.	*			**************************************		Background)
	Con	verte	d to We	ell:	Yes			No	Well I.I	D. #: _.	***************************************				<u> </u>



Converted to Well:

Yes

No

	DRIL DRIL	LING	COMF	PANY:	Por	P Beff. 6022 elta tadi.l	1	GEOLC DRILLE	GIST: R:	MW-306 11-28-11 V.Shickera B. Murphy	- r		
Γ								RIAL DESCRIPTION	Ī		PID/FII) Rea	ding
l	Sample No. and Type or RQD	(Ft.) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soli Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**
İ		126					BM	F-Sand- little Si	1+ 1-d		Ø	0	0
		127					T21	clay					
		128						(mkaceu:	25)				
L		129	\angle				_{G-γ} у						
		130					Bin	F.M Sand-little C sand and sitt True clay			0	0	0
l		13/	/_						\downarrow				
		1.32	/_					(westfared rock freq	<u>、) </u>	nost stains			
		1.33							,		ļ		
ļ	, , , , , , , , , , , , , , , , , , , ,	1.34					Gy Ten	FSand- little silt Trace C Sand and Clay			<u> </u>		
ļ		135	\angle				Bon	· ·			©	0	ဓ
ŀ		176	\angle					(MICACEDUS))				
ŀ	4	1.37	/_								_		
 	د نم	<i>1</i> .38					Gry	ESSA - 1144- 51	<u>.</u>		ļ		
' [5-3	1/27	12/29 22	20/			120	FSend-little sil Trace C Sand on Clay	2				
<u>-</u>	<u>\(\psi \) \(\psi \)</u>		33/36	29"				Cizy	_		0	0	0
		141							$\overline{}$		-		
I		142						(MICECE	0°25)				
ŀ		143											-
)44					BIA	Sr			 		_
ŀ		145			-		120	Sere es abou	<u>د </u>		0	0	0
		146			-						-		
ŀ		147				***************************************		Trage	1.1	1 1	-		
ŀ		148			1		٠,	(Westfur	- 375)	rust stains	\vdash		
		149		 			Bra	C *			0		_
	* Wher	1.52	oring ent	er rock br	okeness		Tzn	Same, 25 about	_ د		<u> </u>	0	٥

Well I.D. #:



NUS, Inc. BORING LOG NWIRA Bethrese BORING No.: MW-3061)

			NUME		11:	2602	2 3	70	DATE:	-	11-28-11	<u> </u>			
			COME		1	lette.			GEOLOGIS	ST:	V. Shickor	4			
	DRIL	LING	RIG:		P	+225	П		DRILLER:	_	B. Murph	/			
j						N	1ATE	RIAL DESCI	RIPTION			PID/FII) Rea	ding (ppm)
	Sample No. and Type or RQD	(Ft.) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material	Classification	∪ ∽ ∪ ∽ *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
		151					Gry Bra	F-Send-	little silt			×	Ċ	\overline{A}	コ
		152					Bin Tan	Clay	little Silt						
		153							(little)			ව	O		0
		154		<u> </u>			Core		1			_			
		155					Gry Bra 127	Same	es above			0	c		0
		156													Ť
		157													
f348		158					Red								
1401	5-4	159	13/7				Red Gry Tan	5.11 -50	F-Sand						
1406 1416	*	160	17/9						İ			0	0	0	0
1416		161													
		162									·				
		163							(C Sord)						
		164					614	`	,						
		165					BM Ten	Some	as above		·····	0	0	٥	٥
		166													
	ļ	167							(Trace)						
		168	1. /						Trace weathered rock Frags						
		169					Gry		,						
	<u> </u>	170					Bri	Sume	as above			٥	٥	0	0
	<u> </u>	171		<u> </u>								 			
ادساف		172		1					(Traise and						
1424 1435		173		_			<i>P</i> -		Fork Frags						
		174		-	-		Ben	٥	<u> </u>		· · · · · · · · · · · · · · · · · · ·			Ö	
	* Whe		-	er rock br	okeness.		Tan	John C	sabove					U	
		ude moi narks:			ot intervals		Increas	e reading frequer	ncy if elevated reponse	read.	Drillir Background			_<	
	Con	verte	d to We	ell:	Yes			No	Well I.[). #:	*				



	PROJE	CT	NAME	:	NwI	RP B=	1000	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	BORING N	o.:	MW-306 11-28-11/ V.Sh.KosA	0			
	PROJE			BER:	11;	2G02	230	/	DATE:		11-28-11	H	· Z <	7-1	//_
	DRILLI			'ANY:	()	e1+2_		1. cm. minut	GEOLOGIS	ST:	V.Sh.KorA				<u>-</u>
	DRILLI	NG	RIG:		¥	ortade			DRILLER:		B. Murphy				=
	No. (F and Type or R	epth Ft.) or tun	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color		lassification	U & C & *	Remarks	Sample Sample	Sampler BZ		Driller BZ** g
	1:	76					Gry	Silt : 591	eccley,			c	0	0	0
		Ť					720	Trace wes	thurd rack Progs		10.11.0	Н	H	\exists	\exists
:	<u> </u>	77	$-\!$						1729S			H	$\vdash\vdash$	\dashv	\dashv
	/7	18	-			***************************************									
);	74	/				Red Gry T27						Ш	_	_
	18	50					经	Same	ecaboue			0	C	0	<u>o</u>
	18	31						1							
	وز	92	$\overline{/}$												
A		83	$\overline{}$												
T		34					Ga.								
, ' -		35	-				Gry Bra	C , **	22 2/2			0		0	
11/2			-				Tzn	Sanesa	a door				\vdash	~	9
711		36 27	-												\dashv
1454 0919		37	_												\dashv
1454	-	88	-									₩	H		-1
0919	13	39					67/	├				<u> </u>			\vdash
H	/	90	<u> </u>				72	Same	cabove			<u>©</u>	0	©	\mathcal{Z}
29	1	91													
11	1	92							(More) (FSand)						
	1	93						८	MICOCOCOCS)						
4	j.	94					STY	\							
		95					Bra	Same	s above			0	0	0	0
		96						1							
		97			1			17	MORE FSEN			1			
		<u>11</u> 98						1 1	(MICACEOUS)			 	H		
		10 99										 	一		
				 	1		Bin	Same as	1	<u> </u>	· · · · ·	8	0	0	0
	* When ro	OC co	oring, ent	er rock bro	okeness.	<u> </u>	150	وني رجيم لي ور	coore	L		<u> </u>	تــــــــــــــــــــــــــــــــــــــ	二	\square
		mon	itor readi	ng in 6 foo		- 1	Increas	e reading frequenc	y if elevated reponse	read.	Drillii Background	_			2
	Conve	rtec	to We	ell:	Yes			No	Well I.). #:	4				_

Tetra Te	ech NUS, Inc.
----------	---------------

		J	Tetra	Tech N	IUS, Inc		BC	RING L	റദ		Pag	le _	1	of <u>/</u>	13
	PRO	JECT	- Name	≣:	N) (42) TR	P 12. 42			BORING N	o.:	MW-306-1)			
	PRO	JECT	NUME	BER:	11	1 Bett 2602 Delta	1:30	<u>-</u>	DATE:		MW-3061 11-29-11 V. Shicker				
			COM	PANY:		Delta			GEOLOGIS	ST:	V. Shickor	1			
	DRIL	LING	RIG:		<u> </u>	artadi			DRILLER:		B. Murphy				
	Sample	Depth	Blows /	Sample	Lithology	<u> </u>	/ATEI	RIAL DESCR	IPTION	U	1	210/FID) Read	ding (p	ppm)
ر د د د سید	No. and Type or RQD	(Ft.) or	6" or RQD (%)	Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Color	Material C	lassification	S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
Time		20l					67	5,1+-50	re to little	,		Ó		0	0
	***						Hon Ton	Trace was	ne to little little FSi thered rock	ر ا		Н			\exists
	<u> </u>	202							Frag	-			┝╼┥		
0931	<u> </u>	263											$\vdash \vdash$	\dashv	\dashv
		204		<u> </u>			Cry	<u> </u>			wasiiwiia waxaa		<u> </u>		
		265					Gry Bra T21	Seme	sebove			Ø	0	0	<u>©</u>
		206						1							
		207													
		208						6	MIZACEDUS)						
		209					Be.	J.	, ,				П		
-		210					500 500	Samo	Ahous			Ø	0	0	0
		211			1		77.1	i	<u> </u>						
		212			1										
		21.3													
		214					200		(more)				П		
		215				,	Bon	Same 25	above			0	0	0	0
		216				"-		١							
		217													
0949		218						1	MICOCOUS)						
1008		219	·/				G-J.Y	→							
		220					Bra	Same	es above			O	0	0	0
		221			<u></u>									Ш	
		222							(1255) (2124)						
		223													
		224					5N	1	<u> </u>						
		225					BON	Sames	sabove			0	0	ව	ව
				er rock br							D.:111:				
					ot intervals & D39		ıncreas	e reading frequenc	y if elevated reponse	read.	Drillir Background	_		2	<u> </u>
	 				- 107							(I-P		_	<u>-</u>
Market Commencer of the	Con	verte	d to We	ell:	Yes			No	Well I.). #:					

TŁ.	Tetra Tech	NUS, Inc.
		41 1

	PRO	JECT	NAME	Ē: <i>i</i>	NWIR	P Bett 2602 Del	္က ၉ခ	ge_			BORING I	No.:	MW-30	60			
			NUME	BER:		2 <i>6</i> 02	23	<u>6</u>			DATE:		11-29- V.Shick	[[
			COM	PANY:		1)cl	+2_	· ·			GEOLOG	-	V. Shick	COST	<u> </u>		
	DRIL	LING	RIG:			Porta					DRILLER:	<u> </u>	B. Mus	Shy			_
	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	1		Color	RIAL [***************************************	·····	TION	U S C S *	Remarks	Sample Sample		Borehole**	Driller BZ**
Time							الما وي	Sil	F : 4	1,41	1c clzy	+		+			
		<u> 226</u>					\$37 123	37	ع	3	de clzy Sand Herd 195	++		10	0	2	의
		227					59177	100	کارے	£7.	367			\perp	Ш		
		228								1	<u> </u>						
		229					Grz										
		230			1		Gry Tên AM	3			above					0	$\overline{}$
							1955	<u> </u>		·	<u> </u>				\vdash		
		231										+					
		232.										+		_	\vdash		
1018	<u> </u>	233									***************************************	_		-	\vdash		
		234					Gry Bon Tan		7	<u> </u>							
		235					1300 1300	Sa.	14-L	ત્ય	above			<u></u> ව	0	0	0
	l	236															
		237								(m	(caceous))					
		238															
	,	239					Cry		1								
		240					Bh	Sa	برسد	عد	above			ර	٥	Ø	0
		241							1								
		242															
		24.3		1													
		244	1. /		ļ .		GIV		1	,							
		245					617 812 120	Sa	ne	ac	above			0	0	0	
		246															
		247															
1637		248									(less)					
1053		249		1	1		Gry				Ĵ.						
,		250	* -				Bra	5.		ء د	ebove		/	0	0	0	0
		n rock d	coring, ent	ter rock br		•						l		<u> </u>			
		^{ude mo} arks:						e reading	g frequ	ency if	elevated repons	se read.	Dı Backgroب	rilling A			<u> </u>
	Nen	iai Nõ.			ice y	139e 1							Backgrot	(pp	***/•	<u></u>	
	Con	verte	d to We	ell:	Yes			No			Well I	.D. #:			***********		
		J	'''								_						

Tetra Ted	ch NUS, inc.
-----------	--------------

	PROJE			≣:	NWI	RP Bo 260.	the	390-		BORING N	o.:	MW-306	<u>D</u> _			
	PROJE			BER:		260.	<u> در د</u>	50 L		DATE:	_	11-29-//				
	DRILLIN DRILLIN			PAINY:		16/1/2				GEOLOGIS DRILLER:) i :	B. Murpi		—		—
	DRILLII	10	KIG.		<u></u>							s. marpi				
Time	Sample De No. (F and o Type or Re RQD N	t.) r ın	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval		Color		riai Clas	sification	บ	Remarks	Sample		Borehole**	Driller BZ**
	25	ci l					Gy.	311 -	litt	e VP Sed			7	ර	0	O
		T	$\overline{}$				Ten	weethe	No.	e VF Sed Trace rock Aags						
	2.	\neg	-						1	(More) F-Sand)			-			
	25	\neg	-				C		+	T-32-2)			${\mathsf T}$			
	2.5	_	$\overline{}$				Gry Br	522	<u> </u>	aboue			0	O	0	
	25		-	<u> </u>			07	Jene	<u>- 25</u> 1	30004				۲		
		57							17:	none Send)			\top	Н		
	28	П							7	:2 <e0:25)< td=""><td></td><td></td><td>†</td><td></td><td></td><td></td></e0:25)<>			†			
	25	\neg	$\overline{}$				Con	,					†			
		60		 			Gry Fen	Same	<u>د دی</u>	above_			0	0	0	0
	20		$\overline{}$,						Ť			
:	26	T								(less)			1			
1059	26									1						
1634	20	54	$\overline{}$				GN	1								
	20	55					Bra	Same	ي نے ر	above			0	0	0	O
	26	6							l							
	24	57														
	20	<u> 8</u>								(less)			<u> </u>			
	20	59	<u>/</u>				Gry	V	/	1			<u> </u>			
	25	7 C					120	Same	ટડ	above.			<u> </u>			
	2;	4		<u> </u>	-				1	,			$oldsymbol{\perp}$	Ļ		
	2	22		ļ						neacous)			 	<u> </u>		
	2	3							(More F-Serd)				<u> </u>		
	7	74					Bin		Ψ_				<u> </u>	_		
		75				1	721	Same	<u> </u>	above.			<u></u>	<u> </u>	<u> </u>	
		mon	itor readi	ng in 6 fo		- ,	Increas	e reading freq	uency if	elevated reponse	read.	Drilli Background				3
٠.	Conver	ted	to We	ell:	Yes		-	No		Well I.	D. #:	A.				

TŁ	Tetra Tech NUS, Inc.
----	----------------------

			NAME	≣:	NWI	RP Bc	tep.	39 <u>e</u> -	BORING N	o.: _	MW-306	<u>() </u>			
			NUME	BER:		RP Bc 2602 Dc/ts	2.30	<u>> </u>	DATE:	ът. Т	11-29-11	, —			
			COME	ANY:	//	Vertu			GEOLOGIS	۶۱: ₋	V. Shickor	<u>f</u>			—
1	DKIL	LING	RIG:		<u> </u>	cradi			DRILLER:		B. Murphy	<u></u>			_
	Sample No. and Type or RQD	(Ft.) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color		Classification	U s c s *	Remarks	Sample Sample			Driller BZ**
		276					Tin	Silt-50	me F Sand			2	රා	0	0
							721	Clay-	The Pock				Ħ		
		277						•	P255				\square		
1115		278	/										$\vdash \vdash$		
1123	\$-5 -}		22/26	14"					<u> </u>				\square		\blacksquare
1132	<u> </u>	280	2827	24"				Sone 2	s shove			0	ථ	0	0
1223		281							·						
		252													
		293							(or creers)				П		
		234					<u> </u>	,							
							Gry Gran	02.	es above			0	0	0	0
		285				<u>'</u>	1 % A	30/we 6	30000			_	H	$\stackrel{\smile}{-}$	\vdash
		286]					\vdash		H
	٠,	287										ļ			
		2 <i>98</i>							MICELEOUS			<u> </u>			
	,	289					Gry Tan	4	•						
		290					Bor	Same	as above			0	0	0	0
		291									11 84, 27				
		292		1	1								П		
											-	H	H		П
1231	5-6	243	29/	11	1		Bra	FSand-	Some Silt			├─			
	H	294	72	12"			12	Trace al	Lrock Flags			 _			
1243	₩_	295	31 4B	24"								0	0	0	0
		296		ļ			ļ				:	╙	Ш		
		297													
		298					Circ		(MICOLOGUE)						
	蹚	299					Bri								
	#	302		1			Tan	Same	es above			0	0	0	
	_ *	- Y	-	er rock br	okeness.			- UINC C	-3 20000						
							Increas	e reading frequer	cy if elevated reponse	read.	Drillin				
	ĸem	narks:			see	Pase.	<u></u> 303	· B&S			Background	(pp	m):		<u>د</u>
	Con	verte	d to We	-II·	Yes			No	Well I.	n #			_		
	COIL	+ U1 (U)	~ 10 AAG	J.11.	100		_			→ . 117 .	*				

Tŧ	Tetra	Tech	NUS,	Inc.
----	-------	------	------	------

			NAMI NUM	=. 3ER·	1 (<u>1 (1)</u>	(P. Dex	402	BURING N DATE:	10.:	11-20-11				
			COM	PANY:	<u> </u>	(P Best 3-0 22) elta_	<u> </u>	GEOLOGI	ST:	11-29-11 V. Shickers				
			RIG:		D.	rtada	//	DRILLER:	• • • •	B. Murphy	<u>. </u>			
								RIAL DESCRIPTION	T		PID/FII) Pag	din a f	
	Sample No. and Type or RQD	(Ft.)	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval			Material Classification	U & C & *	Remarks				Driller BZ**
		301					GTY T2	FSand-Some silt			0.	$\overline{}$	၁	0
		302					Brn	F Sond-Some silt Trace clay and Quarte/rock Frags						
		303	$\overline{}$						\vdash					
1306	 	<u>305</u>	$\overline{}$		Faß				+		0	0	2	0
	\vdash		$\overline{}$		1-(4)		T	· · · · · · · · · · · · · · · · · · ·	\vdash					
	\vdash													
	 				•				\vdash					_
	 								\vdash					
												_		
	*			<u> </u>										
										·				
			-	,						<u></u>				
					İ									
											·····			
				1										
				1										
	** Inclu	ıde mor	itor readi	er rock bro	t intervals (@ borehole.	Increas	e reading frequency if elevated reponse	read.	Drillin				
	rem	arks:		LSec	-pag	<u>) </u>				Background	(ppi	n):		
	Conv	verted	to We	ell:	Yes			No Well I.	D. #:					***************************************



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 10/28/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLING RIG: Mud Rotary / Hollow Stem Auger DRILLER: B. Murphy / K. Cronin

1-2	DIVILLI	ING RIG:	1	ı	IVIGG I C			em Auger DRILLER:	1	B. Murpny / K. Cronin						
No. and No.	Cample	Donth (Et \	Blows /	Sample	Lithology	N	//ATEF	RIAL DESCRIPTION	۱	ľ	PID/FII	D Rea	ding (ppm)		
S-1 U-1	No. and Type or	or	6" or RQD	Recovery / Sample	Change (Depth/Ft.) or Screened	Consistency or Rock	Color	Material Classification	S C	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**		
1-2	S-1	0-1						Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0		
3-4		1-2						tr. little, med. Gravel,moist.	SM							
S-2 5-6 Tan-Lt bm tr. little, med. Quartzose gravel SM Logged auger cuttings. O O O		2-3														
S-2 5-6 Tan-Lt bm Sitty, medium-coarse sand, SM Logged auger cuttings. O O O O		3-4														
S-2 S-6		4-5														
1-12 Tan-Lt bm S-2	5-6						Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0			
8-9		6-7						tr. little, med. Quartzose gravel	SM							
S-3 10-11 Tan-Lt. bm Silty, medium-coarse sand, SM Logged auger cuttings. 0 0 0		7-8						moist.								
S-3 10-11		8-9														
11-12		9-10														
11-12	S-3	10-11					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0		
13-14		11-12						tr. little, med. Quartzose gravel	SM							
14-15		12-13						moist.								
S-4 15-16 Tan-Lt. bm Silty, medium-coarse sand, SM Logged auger cuttings. 0 0 0 16-17 Tan-Lt. bm tr. little, med. Quartzose gravel SM		13-14														
S-4 15-16		14-15			****************											
17-18	S-4	15-16					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0		
18-19		16-17						tr. little, med. Quartzose gravel	SM							
19-20		17-18						moist.								
S-5 20-21 Tan-Lt. brn Silty, medium-coarse sand, SM Logged auger cuttings. 0 0 0 21-22 Tan-Lt. brn tr. little, med. Quartzose gravel SM SM Image:		18-19														
S-5 20-21 bm Silty, medium-coarse sand, SM Logged auger cuttings. 0 0 0 0 21-22 Tan-Lt. bm tr. little, med. Quartzose gravel SM 22-23 moist.		19-20														
22-23 bm tr. little, med. Quartzose gravel Sid	S-5	20-21					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0		
23-24		21-22						tr. little, med. Quartzose gravel	SM							
		22-23						moist.								
 24-25 /																
Drilling Area		24-25									Ļ					

						Drilling Area_	
Remarks:	Set 8" I.D. Sch. 40 st	eel surface	casing to 25' be	elow ground surface. (Failir	ng F-10)	Background (ppm):	0
	12" ID HAS borehole	e. Soil backfill above. ((Strieber/Pratt)				
	Drilled borehole to de	epth on 10/2	8, installed cas	ing 10/31.			
Converted to W	ell: Y	es	X	No	Well I.D. #: BPS1	-TT-MW307D	
					·		



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

112G02230 11/3/2011 PROJECT NUMBER: DATE: Delta Drilling DRILLING COMPANY: GEOLOGIST: J. Ferguson

Mud Rotary / Hollow Stem Auger B. Murphy / K. Cronin DRILLING RIG: DRILLER:

					l 1	ИАТЕР	RIAL DESCRIPTION			PID/FII) Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval			Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-6	25-26					Tan- brn	Silty, fine to coarse sand and	SM/ GM	Screened mud rotary	0	0	0	0
	26-27						fine to coarse gravel moist.	SM/ GM	cuttings. 08:37				
	27-28			XXXX									
	28-29												
	29-30			$\otimes \otimes \otimes$									
	30-31												
	31-32			XXX									
	32-33						Silt	ML	Geophysical log.				
	33-34							ML					
	34-35							ML					
S-7	35-36					Tan- brn	Silty, sandy (fine) fine to med	SM/ GM	M/ Screened mud rotary		0	0	0
	36-37			XXXX		Tan- brn	quartzose gravel, and gravelly	SM/ GM	cuttings.				
	37-38					Tan- brn	fine to coarse sand.	SM/ GM					
	38-39			8888									
	39-40												
	40-41												
	41-42												
	42-43												
	43-44			XXX									
	44-45												
	45-46								Mud takes in upper 25'-5	50'			
	46-47								of formation (+/-250 gal.)			
	47-48			100000									
S-8*	48-49	19-23			Dense	Red brn	Silty, med-coarse sand, wet.	SM	Split spoon sample	0	0	0	0
	49-50	26-28				Red brn	tr. to little fine to med gravel.	SM	9:00 Drillir				

	46-47									of formation (+/-250 gal.)				
	47-48													
S-8*	48-49	19-23		Dense	Red brn	Silty, med-co	oarse sand, v	vet.	SM	Split spoon sample	0	0	0	0
	49-50	26-28			Red brn	tr. to little fin	e to med gra	vel.	SM	9:00				
Remar	ks:									Drillin Background			()
Conve	Converted to Well: Yes				_	No		Well I.D	D. #:	BPS1-TT-MW307D				



Page <u>3</u> of <u>18</u>

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/3/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

					N	RIAL DESCRIPTION		1	PID/FII) Rea	ding (ppm)	
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	50-51						Silt	ML	Geophysical log.				
	51-52												
	52-53												
	53-54												
	54-55												
	55-56									0	0	0	0
	56-57												
	57-58												
S-9*	58-59	22-23			Dense	Gray- Red brn	Silty, med to coarse sand,	SM	Split spoon sample.	0	0	0	0
	59-60	25-30				Gray- Red brn	tr. to little fine to med gravel,	SM					
	60-61					Gray- Red brn	wet.	SM					
S-11	61-62					Tan- Red brn	Silty, fine to coarse sand, tr.	SM SP	Screened mud rotary				
	62-63					Tan- Red brn	silt laminae, tr. fine gravel.	SM SP	cuttings.				
	63-64												
	64-65												
	65-66									0	0	0	0
	66-67					Tan- Red brn		SM SP					
	67-68												
	68-69												
	69-70												
	70-71									0	0	0	0
	71-72					Tan- Red brn		SM SP					
	72-73												
	73-74												
	74-75												
									Drillir	na A	rea		

				Drilling Area
Remarks:				Background (ppm): 0
Converted to Well:	Yes	Χ	No	Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/3/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

						MATER	IAL DESCRIPTION			PID/FI	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	75-76					Tan- Red brn	Silty, fine to coarse sand, tr.	SM SP	Screened mud rotary				
	76-77					Tan- Red brn	silt laminae, tr. fine gravel	SM SP	cuttings.				
	77-78						little lignite						
S-12	78-79					Red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	79-80					Red brn	gray silt laminae, tr. fine gravel.	SM	cuttings. 10:00				
	80-81												
	81-82												
	82-83												
	83-84												
	84-85												
	85-86												
	86-87												
	87-88												
S-13	88-89					Red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	89-90					Red brn	gray silt laminae, tr. fine gravel.	SM	cuttings. 10:20				
	90-91												
	91-92												
	92-93	/											
	93-94						Silt and clay	ML CL	Geophysical log.				
	94-95						Silt and clay	ML CL					
	95-96						Silt and clay	ML CL					Ш
	96-97					Red brn		SM	Drillers mix additional m	ud			Ш
	97-98					0 :			loss +/- 200 gals.				Щ
S-14	98-99					Gray-red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	99-100					Gray-red brn	gray silt laminae, tr. fine gravel.	SM	cuttings. 10:25				

				brn 3 3	,	3		
	_	_				Drillin	g Area	
Remark	:s:					Background	(ppm):	0
Convert	ted to Well:	Yes	Х	No	Well I.	D. #: BPS1-TT-MW307D		



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/3/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

					N	ЛАТЕР	RIAL DESCRIPTION			PID/FII	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	100-101					Gray- red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary				
	101-102					Gray- red brn	gray silt laminae, tr. fine gravel.	SM	cuttings.				
	102-103												
	103-104												
	104-105												
	105-106												
	106-107												
	107-108												
S-15	108-109					Gray- red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	109-110					Gray- red brn	gray silt laminae, tr. fine gravel.	SM	cuttings.				
	110-111												
	111-112												
	112-113												
	113-114												
	114-115												
	115-116												
	116-117												
	117-118												
S-16*	118-119	18-24				Gray- red brn	Micaceous, clayey, fine to med	SC CL	Screened mud rotary	0	0	0	0
	119-120	28-30				Gray- red brn	sand and sandy (fine) clay.	CL	cuttings.				
	120-121												
	121-122												
	122-123												
	123-124												
	124-125												
Remar			<u> </u>		<u> </u>			1	I Drillir Background				(

										Drilling	g Aı	ea		
Remark	ks:							_	Backgr	ound	(ppi	m):	()
Conver	ted to We	ell:	Yes	X	No	We	I I.D. #	: B	PS1-TT-MW	307D				
					_									



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/3/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

						/ATEF	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppm
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	125-126												
	126-127												
	127-128			•									T
S-17*	128-129	26-30			Dense	Gray- red	Silty very fine to fine sand.	SM SP	Split spoon sample.	0	0	0	0
	129-130	34-39				Gray- red		SM SP	11:31				
	130-131												
	131-132												
	132-133												
	133-134			1									T
	134-135			-									T
	135-136			1									
	136-137			1									
	137-138			1									
	138-139												
	139-140												
	140-141												
	141-142												
	142-143												
	143-144												
	144-145												
	145-146												
	146-147												
	147-148						Silt and clay	ML CL	Geophysical log.				
	148-149						Silt and clay	ML CL					
	149-150						Silt and clay	ML CL	Dril				

								Drilling Area
Remarks:								Background (ppm): 0
Converted to Wel	l:	Yes	Χ	No)	Well I.	D. #:	BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/3/2011 DRILLING COMPANY: **Delta Drilling** GEOLOGIST: J. Ferguson

Mud Rotary / Hollow Stem Auger B. Murphy / K. Cronin DRILLING RIG: DRILLER:

					N	/ATEF	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppm
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151						Silt and clay	ML CL	Geophysical log.				
	151-152												
	152-153												T
	153-154												T
	154-155												
	155-156												
	156-157												T
	157-158							ML CL	Geophysical log.				T
S-18	158-159					Tan-red brn	Sandy (fine-med) clay and	SC CL	Screened mud rotary	0	0	0	0
	159-160					Tan-red brn	clayey, fine-med sand.	SC CL	cuttings. 13:26				
	160-161												
	161-162												
	162-163												
	163-164			MM									
	164-165			MM									
	165-166			MM									
	166-167												
	167-168												
	168-169			MM									
	169-170												
	170-171	/		MM			Silt and clay	ML CL	Geophysical log.				
	171-172	/		MM									
	172-173	/											
	173-174	/											
	174-175			MM	1								

173-174 174-175										
Remarks:						Drillin્ Background (g Ar (ppr	rea m):	0	
Converted to Well:	Yes _	Х	No	Well I.D). #:	BPS1-TT-MW307D				<u> </u>



DRILLING RIG:

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307 PROJECT NUMBER: 112G02230 DATE: 11/3/2011 DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson Mud Rotary / Hollow Stem Auger B. Murphy / K. Cronin

DRILLER:

					N	JATE	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppr
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Drillor B7**
	175-176					Tan-red brn	Sandy (fine-med) clay and	SC CL	Screened mud rotary				T
	176-177					Tan-red brn	clayey, fine-med. sand.	SC CL	cuttings. 13:26				
	177-178						Sandy silt and clay	ML CL	Geophysical log.				
	178-179												
	179-180												
	180-181												
	181-182												T
	182-183												T
	183-184												T
	184-185												1
	185-186												T
	186-187												T
	187-188												T
	188-189												T
	189-190												T
	190-191												T
	191-192												T
	192-193												Ī
	193-194												Ī
	194-195			1									Ī
	195-196												Ī
	196-197												Ī
	197-198												Ī
	198-199						Sandy silt and clay	ML CL	Geophysical log.				Ī
	199-200												Ī

Remarks:				Background (ppm): 0
Converted to Well:	Yes	Χ	No	Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/3-4/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

					N	ИАТЕГ	RIAL DESCRIPTION			PID/FII	D Rea	ding (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	200-201						Sandy silt and clay	ML CL	Geophysical log.				
	201-202												
	202-203												
S-19	203-204					Tan	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	204-205					Tan	Interbedded sandy(fine) silt and	SM ML	cuttings. 14:45				
	205-206 Tan silty fine sand.		silty fine sand.	SM ML	Geophysical log.								
	206-207						,						
	207-208												
S-20	208-209					Gray- org Brn	Interbedded sandy(fine) silt and	SM ML					
	209-210					Gray- org Brn	silty fine sand.	SM ML					
	210-211												
	211-212												
	212-213												
	213-214												
	214-215												
	215-216												
	216-217												
	217-218												
S-21*	218-219					Gray- Org Brn	Silty fine-med sand.	SM ML	Stopped @ 218' 11/03.				
	219-220					Gray- Org Brn		SM ML	Split spoon sample				
	220-221												
	221-222												
	222-223												
	223-224												
	224-225												
Remar	ko								Drillii Backgroupe			($\overline{}$

				Brilling Area
Remarks:	Background (ppm): 0			
Converted to Wel	l: Yes	Х	No	Well I.D. #: BPS1-TT-MW307D



Converted to Well:

Yes

Χ

No

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/4/2011

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLING RIG: Drilling DRILLER: B. Murphy / K. Cronin

					N	/ATE	RIAL DESCRIPTION			PID/FII	D Rea	ding (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-21	225-226					Tan- Org brn	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	226-227												
	227-228												
	228-229												
	229-230												
	230-231												
	231-232												
	232-233												
	233-234												
	234-235												
	235-236												
	236-237												
	237-238												
	238-239												
	239-240												
	240-241												
	241-242												
	242-243												
	243-244												
	244-245												
S-22	245-246					Tan- gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	246-247												
	247-248												
S-23*	248-249					Tan- gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	249-250						laminae.						
Da:									Drillii	ng A	rea		
Remar	KS:								Background	(pp	m):	(0

Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/4/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

						/ATE	RIAL DESCRIPTION			PID/FII) Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Recovery / Sample	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	250-251												
	251-252												
	252-253												
	253-254												
	254-255												
	255-256												
	256-257												
	257-258												
	258-259												
	259-260												
S-24	260-261					Tan- gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	261-262					Tan- gray	Silty fine-med sand.	SM					
	262-263												
	263-264												
	264-265												
	265-266												
	266-267												
	267-268												
	268-269												
	269-270												
	270-271												
	271-272												
S-25	272-273					Tan- gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	273-274					Tan- gray	Silty fine-med sand.	SM					
	274-275												
Domor	1 -								Drillir	ıg A	rea		

					gray								
	273-274				Tan- gray	Silty fine-med sand.		SM					
	274-275												
									Drillin	g Aı	rea		
Remar	ks:								Background			0	
	,								•				_
_													_
Convei	rted to We	ell:	Yes	X	_	No	Well I.I	J. #:	BPS1-TT-MW307D				



Converted to Well:

Yes

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: <u>112G02230</u> DATE: <u>11/4/2011</u>

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLING RIG: Drilling GEOLOGIST: J. Ferguson

DRILLER: B. Murphy / K. Cronin

	or	Sample		N	/ATE	RIAL DESCRIPTION	J	1	PID/FII) Rea	ding ((ppm)
Sample No. and Type or RQD		Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	275-276											
	276-277											
	277-278											
	278-279											
	279-280											
S-26	280-281				Tan- gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	281-282				Tan- gray	Silty fine-med sand.	SM					
	282-283		p:::::::::::::::::::::::::::::::::::::									
	283-284											
	284-285											
	285-286											
	286-287											
	287-288					Silt and clay	ML CL	Geopysical log.				
	288-289											
	289-290											
	290-291											
	291-292											
	292-293											
	293-294											
	294-295											
S-27	295-296				Tan- gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	296-297				Tan- gray	tr. little, med. Quartzose gravel	SM					
	297-298											
	298-299											
	299-300											

No

Χ

Well I.D. #: BPS1-TT-MW307D



DRILLING RIG:

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

DRILLER:

11/4/2011 PROJECT NUMBER: 112G02230 DATE:

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson Mud Rotary / Hollow Stem Auger B. Murphy / K. Cronin

	Depth (Ft.) or Blows / Sample Change MATERIAL DESCRIPTION		RIAL DESCRIPTION		P	ID/FII) Rea	ding (ppm)			
Sample No. and Type or RQD			Change	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	300-301											
	301-302											
	302-303											
	303-304											
	304-305											
	305-306											
	306-307											
	307-308				Tan-Silty fine med sand tr silt							
S-28*	308-309				gray Slity fine-med sand, tr. slit		SM	Split spoon sample	0	0	0	0
	309-310				Tan- gray laminae.		SM	Resumed drilling @ 308'				
	310-311				gray			11/04/2011.				
	311-312											
	312-313											
	313-314											
	314-315											
	315-316											
	316-317											
	317-318											
	318-319											
	319-320											
	320-321											
	321-322											
	322-323	/										
S-29*	323-324	16-24		Dense	Tan-brn	Silty very fine-fine sand, tr. silt	SM SP	Split spoon sample	0	0	0	0
	324-325	26-30			Tan-brn	laminae.	SM SP	Drillin				

				Drilling Area
Remarks:				Background (ppm): 0
Converted to Well:	Yes	Χ	No	Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/4-7/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

	or				N	//ATEF	RIAL DESCRIPTION		F	PID/FII) Rea	ding ((ppm)
Sample No. and Type or RQD		Blows / 6" or RQD (%)	Recovery / Sample		Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	325-326												
	326-327												
	327-328			-									
	328-329			1									
	329-330												
	330-331												
	331-332												
	332-333								Stopped @ 333' 11/04.				
	333-334			1									
	334-335												
	335-336												
	336-337												
	337-338												
S-30*	338-339	18-20			Dense	Gray- Red brn	Silty, very fine-fine sand.	SM	Split spoon sample	0	0	0	0
	339-340	22-26											
	340-341												
	341-342												
	342-343												
	343-344			-									
	344-345												
	345-346												
	346-347							_					
	347-348							<u> </u>					
	348-349			_									
	349-350								Drillin				

	347-348													
	348-349													
	349-350													
Remark			- Delta	onsite t	o run natı	ural ga	ammal lo	g from G	S to 350'.		Drillii Background		C)
Converted to Well:			Yes	X	,	No		Well I.I	D. #:	BPS1-TT-MW307D				



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307
PROJECT NUMBER: 112G02230 DATE: 11/7/2011

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

					N	ЛАТЕР	RIAL DESCRIPTION			PID/FII	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	350-351												
	351-352												
	352-353												
S-32*	353-354	18-24			Dense	Gray- red brn	Very fine-med sand, tr. silt	SP	Split spoon sample	0	0	0	0
	354-355	28-32											
	355-356												
	356-357												
	357-358												
	358-359												
	359-360												
	360-361												
	361-362												
	362-363												
	363-364												
	364-365												
	365-366												
	366-367												
	367-368												
	368-369												
	369-370												
	370-371												
	371-372												
	372-373												
S-33	373-374					Gray- red brn	Very fine-med sand, tr. silt	SP	Screened mud rotary	0	0	0	0
	374-375								cuttings.				

		/			ica biii									
	374-375									cuttings.				
										Drill	ng A	rea		
Remarl	ks:									Backgroun	d (pr	om):	0	,
												_		
Conver	ted to Wel	I:	Yes	Χ	_	No	_ \	Nell I.D). #:	BPS1-TT-MW307)			
														

PID/FID Reading (ppm)



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307 11/7/2011 PROJECT NUMBER: 112G02230 DATE: DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson Mud Rotary / Hollow Stem Auger DRILLING RIG: DRILLER: B. Murphy / K. Cronin

MATERIAL DESCRIPTION

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	375-376												
	376-377												
	377-378			-									
	378-379												
	379-380			•									
	380-381												
	381-382												
	382-383												
S-34*	383-384	18-24			Very dense	Tan- gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	(
	384-385	28-32				Tan- gray	laminae.	SM	13:15				
	385-386					giaj							
	386-387			1									
	387-388												
	388-389												
	389-390												
	390-391												
	391-392												
	392-393												
	393-394												
	394-395												
	395-396												
	396-397												
	397-398												
	398-399												
	399-400												
Remar	ks: rted to We			Yes	X		No Well I.	D #·	Drilling Background	l (pp	rea m):	(0



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: <u>112G02230</u> DATE: <u>11/7/2011</u>

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLING RIG: Drilling GEOLOGIST: J. Ferguson

DRILLER: B. Murphy / K. Cronin

					N	/ATE	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	400-401												
	401-402												
	402-403												
	403-404												
	404-405												
	405-406												
	406-407												
	407-408												
	408-409												
	409-410												
	410-411												
	411-412												
	412-413												
S-35*	413-414	22-25			Very dense	Tan- gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	414-415	27-30				Tan- gray	laminae.	SM	14:35				
	415-416												
	416-417												
	417-418												
	418-419												
	419-420												
	420-421			ļ									
	421-422			ļ									
	422-423			<u>k</u>									
S-36	423-424	16-24				Tan- gray	Silty fine-med sand, tr. silt	SM	Mud rotary cuttings.				
	424-425	26-30				Tan- gray	laminae.	SM					
Remar	ko								Drillii Backgroupe				

Remarks:				Background (ppm): 0
Converted to Well:	Yes	X	No _	Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW307

PROJECT NUMBER: 112G02230 DATE: 11/7/2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

Cample	Depth (Ft.)	Blewe /	Commis	Lithalamı	I\	/IATE	RIAL DESCRIPTION	.		PID/FI	D Rea	ding ((ppi
Sample No. and Type or RQD	or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Drillor D 7**
	425-426												T
	426-427												T
	427-428												T
	428-429												Ī
	429-430												Ī
	430-431												
	431-432												T
	432-433												Ī
S-37*	433-434	20-24			Very dense	Tan- gray	Fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	
	434-435	29-30				Tan- gray	laminae.	SM	14:35				
							Bottom of boring = 435'						
													L
													Ļ
													Ļ
										-			_
													Ł
													H
										_			H
													H
													H
													t
										T			t
										T			T
													Ī

												Drillin				
Remark	ks: <u>1</u>	6:00 De	elta logs	borehole	from GS to	433'.					Bac	kground	(ppr	n):[()
											-					
Conver	rted to We	ell:		Yes	X		No	_	Well I.[D. #:	BPS1-TT-M	1W307D				
							_	<u> </u>								

(Tt)	Tetra	Tech	NUS,	Inc.
------	-------	------	------	------

Page ___ of _____

	PRO	JECT	I NAM I NUM 3 COM	BER:	Della Della	ZP Re	<u>twh</u> ⇔	DATE: GEOLOG		11-11-11 J. Birkett	<u></u>			
and the second			RIG:			ng 110		DRILLER		J. Gueci				
·						Ī.	IATEI	RIAL DESCRIPTION			PID/FII	D Rea	ıding ((ppm)
Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U	Remarks		Sampler BZ	Borehole**	Driller BZ**
							Tan	Found and sill In Stavel		Post hole dieta	0	۵	\bigcirc	0
							Bik	Found and sill some gravel	 	Posthole digto moist 5 bgs				
									+	<u> </u>	0	ス	0	7
					- ~ -		Bik	F-M sand somesilf and grow	1	moist		H	H	
113,5		5						3	<u> </u>		0	H	0	_
حزفرا	<u> </u>	?					Blk							
	 						PKEM	F-C sand some sill adgram	1	Moist	0	0	0	0
												\vdash		
		······································							+			\vdash		
1135		1.0							-					
כביו		10					Rik	SM-Med	<u> </u>					
						$\vec{\nu}$	Br Br	F-C sand somesilt and public trism. liggial	i l	Moist	0	0	0	0
		4		<u> </u>				11,5(1) [1]	<u>'</u>				Ш	
			/				i		_				Ш	
									_					
1140	ļ	15						2.70	ļ			Ш	Ш	
				,			Blk.	F-M sand some sillifebblosand	اندوا و	Moist	\Diamond	0	0	0
									<u> </u>					
1144		20												
							BV DK	F.M Sand some sill and pubble tr. sm. gravel	5	moist	0	0	ပ	0
								tr. sm. graver						
														-
														T
		7.5							1			П		
	* When	rock c	oring, ent	er rock bro	keness.				<u></u>		<u>'</u>			<u></u>
	"Inclu	de mon arks:	itor readii	ng in 6 too	t intervals (borehole.	ncrease MW	e reading frequency if elevated reponse	read.	ica Background	ig Ai (nn)	rea m\-	<u></u>	0
			474	Wh I	12 × 8	ach Ol-	au	e reading frequency if elevated reponse 300 For defailed by Gers Knocked and at TA No Well I.	יוויסו),	(PP)		<u>''</u>	<u> </u>
	Conv	ertec	to We	-го ск г	Yes	X lead at	'9** }	No Well I.	D. #:	BPSI-MW308	5			

Page _sof 3

	PROJECT NAME: PROJECT NUMBER DRILLING COMPAN				NWI	RP Be	the page	<u> 3e</u>	BORIN	NG No	.:	BPSI-MW= 11-11-11 J.Birkett	308 308	\$		
on the	DHIL	LING	i COM	PANY:	Dell	<u> </u>			GEOL	OGIST	Γ: [J. Birkelt				
	DHIL	LINC	RIG:	·	Fort[fr	9110			DRILL	EH:	_;	J. Gueci				
en.	Sample No. and Type or RQD	(Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	RIAL DESC	CRIPTION al Classification		U S C S *	Remarks	Sample Sample		Borehole**	
Time		75			<u> </u>		_				_		+			
	-						Br	F-C sand	some surmed silt and indicate	pebbles		moist	0	0	0	0
			/					4+	- Silt and Modic	jraval						<u> </u>
			/								_		-			_
											_		+	igdot		<u> </u>
1149		30							en annel		_					
			/_				Bm	M-Csand	smmed some pelabics silt and med.		_	Moist	0	\circ	0	0
			/					ŀn	sill and med.	gravel	_		丄			
													$oldsymbol{\perp}$			
1152		35														
							Brn	M.C. sand	some public sill and gre	*		Moist	0	0	0	0
								þr,	Sill and gra	Te i						Г
		•									1		\top			
											7		\top	П		\Box
1156		40											†			
•							Ona Bin	F-M Soul	tr. silt and sm)ehhla		Moist	0	0	ပ	5
					;		JIK		141 211 chat 214	200.03	\dashv	(1,0121	一		\	Ť
											_		+			┢
					!								+	\Box		
يرم حا		45							·····	+	-		1			
Izco		<i>د</i> ر					org Srx	r- 00 .	1 1, , 5	W. (\dashv			_	-	<u> </u>
							30%	F-141 SOUNT	tr. sill and p	eppe _		Moist	0	0	0	0
										-	_		+	-		<u> </u>
			-								_			<u> </u>	<u> </u>	┞
	<u> </u>		/_								_		_		_	
1205		50														
	** Inclu	de mon	itor readir	er rock bro ng in 6 foo	t intervals	@ borehole. I	ncrease	reading freque	ency if elevated rep	onse rea	id.		ing A			
	Rem	arks:	See	Fir s	t page	·						Background				0
	^ -		11. \^.	- 11		\ /		NI-	***	11 1 55	"	000				
	Conv	ertec	to We	ell:	Yes			No	W€	ell I.D.	#:	BPSI-MW30	<u>ర 15</u>			

TŁ	Tetra Tech NUS, Inc	Э.
----	---------------------	----

Page 3 of 3

	PRO	JECT	NAM	E:	NWIF	2230	thpag	e BO	RING No.:	BPS1-MW302\$ 11-11-11 J. Birkett				
	PHO	JECT	NUM:	BER: Pany.	11200	2236		DAT	TE: OLOGIST:	11-11-11				
······································			i RIG:	i Alvii.		110		DRI	OLOGIST. ILLER:	J. Gueci			***************************************	
				l	,	M	ATF	RIAL DESCRIPTION			PID/FII	D Rea	ding (ı	nnm)
í	Sample No. and Type or RQD	(Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color		U s c	Remarks		Sampler BZ		Driller BZ**
Timp		50					org Bin	F-M sand tr. sill and	sn.		0	0		Δ.
			-				Bin	F-11 Sand to Silt and	d pelololes	moist			0	<u>٥</u>
										1				
1208		55						***************************************						
			\angle			••••	ald)"	FM sandtr sill and	C. sand	Moist	0	0	0	Ö
			\angle					***************************************						
			-							_	\square	\square	\dashv	
lab		60		<u> </u>							-			
1000		90		<u> </u>			org Bin	F.M sand tr. silland	1 Cond	moist	0	0	0	_
						***************************************	DIK	7 - V saud 117 Sirang	e or Series	7,00.31				
		۲.												
		64						***************************************						
1216		<i>6</i> 5			€0B 64'bgs							Щ	\dashv	
			-									$\vdash \vdash$	\dashv	
			-										\dashv	
			-											
			$/\!\!-$							<u></u>	\vdash			
	* When	rock co	oring, ente	er rock bro	keness.				<u>_</u>		Щ			
	** Inclu	de mon		ng in 6 foo			ncrease	e reading frequency if elevated	d reponse read.	Drillir Background			0.	Ö
	Conv	ertec	l to We	ell:	Yes			No	Well I.D. #	: BPSI-MW302	3.\$.			



BORING LOG

Page _1__ of _12__

Site 1 - Investigation PROJECT NAME: BORING No.: BPS1-TT-MW308 112G02230 10/24/2011 PROJECT NUMBER: DATE: DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

_	טוא טווו.	•		- IVIGG I K	nary / no		DRILLER.		B. Murphy / K. Cron				—
	D (1 (5)	. .			N	MATE	RIAL DESCRIPTION	١	F	ID/FII) Rea	ding (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2						trace-little, med. Gravel,moist.	SM					
	2-3												
	3-4												
	4-5												
S-2	5-6					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7						trace-little, med. Gravel,moist.	SM					
	7-8												
	8-9												
	9-10												
S-3	10-11					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12						little- med. to coarse gravel,	SM					
	12-13						moist.						
	13-14												
	14-15												
S-4	15-16					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17						little- med. to coarse gravel,	SM					
	17-18						moist.						
	18-19												
	19-20												
S-5	20-21					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22						little- med. to coarse gravel,	SM					
	22-23						moist.						
	23-24	/											
	24-25								Drillin				

	24-25															
												Drillir	ng A	rea		
Remar	ks:	Set 8" I.D.	Sch. 40	steel sur	face casing	to 25' b	elow grou	und surface.			_,	Background	(pp	m):	0	1
		12" ID HS	A boreho	ole to 25' l	3GS, annula	ar space	filled wit	th bentonite at	base. Soil	backfil	ll above.					
Conve	rted to V	Vell:		Yes	X		No		Well I.	D. #:	BPS1-	-TT-MW308D				



BORING LOG

Page	2	of	12

Site 1 - Investigation PROJECT NAME: BORING No.: BPS1-TT-MW308 PROJECT NUMBER: 112G02230 10/25/2011 DATE: Delta Drilling DRILLING COMPANY: GEOLOGIST: J. Ferguson DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

					l N	ИАТЕР	RIAL DESCRIPTION			PID/FII) Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	25-26												
	26-27												
	27-28												
S-6	28-29			1 8888		Tan- Lt. brn	Fine to coarse sand and	SP/G P	Screened mud rotary	0	0	0	0
	29-30			XXX			fine to coarse gravel, moist.	SP/G P	cuttings.				
	30-31												
	31-32												
	32-33												
	33-34												
	34-35												
	35-36												
	36-37												
	37-38												
S-7	38-39					Tan- brn	Fine to coarse sand and	SP/G P	Screened mud rotary	0	0	0	0
	39-40			XXXX		Tan- brn	fine to coarse gravel, moist.	SP/G P	cuttings.				
	40-41			XXX			Sand and gravel is quartitic.						
	41-42												
	42-43												
S-8	43-44			XXXX		Tan- brn	Fine to coarse sand and	SP/G P	Screened mud rotary	0	0	0	0
	44-45			XXX			fine to coarse gravel, moist.	SP/G P	cuttings.				
	45-46												
	46-47												
	47-48												
	48-49												
	49-50								Drillir				

	46-47														
	47-48				_										
	48-49				_										
	49-50				_										
											Drillin				
Rema	ırks:	Lost >10	00 gallo	ons mud	between	43' to	48'.			_ E	Background	(pp	m):	C)
			*												
_								\A			- 1 0 1 (O O O O O				
Conve	erted to V	/Vell:		Yes	Χ	ı.	No	 Well I.	D. #:	BPS1-T	Γ-MW308D				



BORING LOG

Page	3	of	12

Site 1 - Investigation PROJECT NAME: BORING No.: BPS1-TT-MW308 PROJECT NUMBER: 112G02230 10/25/2011 DATE: Delta Drilling DRILLING COMPANY: GEOLOGIST: J. Ferguson DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

					N	ЛАТЕГ	RIAL DESCRIPTION			PID/FII) Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-9	50-51					Tan- brn	Fine to coarse sand and	SP/G P	Screened mud rotary	0	0	0	0
	51-52			XXX			fine to coarse gravel, moist.	SP/G P	cuttings.				
	52-53						Sand and gravel is quartz.						
S-10*	53-54	18-23	1.2		Dense	Tan- brn	Fine to coarse sand, little	SP	Split barrel sampler	0	0	0	0
	54-55	30-34	2.0				fine to coarse quartzose gravel,	SP					
	55-56						wet.						
	56-57												
	57-58												
S-11	58-59					Tan- Gray	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	59-60						sand, wet.	SM	cuttings.				
	60-61												
	61-62												
	62-63												
S-12*	63-64	12-18	1.4			Tan- Gray	Silty, micaceous, fine to coarse	SM	Split spoon sample.	0	0	0	0
	64-65	28-35	2.0				sand, trace silt laminae, wet.	SM					
	65-66												
	66-67												
	67-68								Resumed drilling 10/26.				
S-13	68-69					Tan- Gray	Silty, fine to medium sand and	SM ML	Mud rotary cuttings and	0	0	0	0
	69-70						sandy (f-m) silt.	SM ML	geophysical log.				
	70-71						Silty, Sand		Geophysical log.				
	71-72												
	72-73												
	73-74												
	74-75												

	72-73																
	73-74																
	74-75																
														Dril	ling	Area	
Remark	ks:	Stopped	drilling @	9 68' due	to broken	hydraulic	line.	Resume	d @ 68	' 10/26/ ⁻	11.	_	Bac	kgrour	nd (p	pm):	0
O =	4 1 4 - 1/	V - II.		\/			.1.			\A/ - II	ID #	DDC	TT N	1111000			
Convert	tea to v	veii:		Yes	Х	. Г	No _			weii	I.D. #:	BPS,	I - I I -IV	1W308	ט		



BORING LOG

Page	4	of	12

Site 1 - Investigation PROJECT NAME: BORING No.: BPS1-TT-MW308 PROJECT NUMBER: 112G02230 10/26/2011 DATE: Delta Drilling DRILLING COMPANY: GEOLOGIST: J. Ferguson DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

Sample No. and Type or ROD (%) S-14 75-76 S-14 75-76 S-15 78-79 S-15 78-79 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-86 S-17 Sample Length Properties of Part Rod (%) Sample (Depth/FL) Soil Density/ Consistency or Rock Hardness S-16 S-17 Soil Density/ Consistency or Rock Hardness S-18 Soil Density/ Consistency or Rock Hardness S-18 Soil Density/ Consistency or Rock Hardness S-18 Soil Density/ Consistency or Rock Hardness Soil Density/ Consistency or Rock Hardness Soil Density/ Consistency or Rock Hardness Soil Density/ Consistency or Rock Hardness Soil Density/ Consistency Color Material Classification S Soil Density/ Consistency or Rock Hardness Soil Density/ Consistency Color Material Classification S Soil Density/ Consistency Color Material Classification S Soil Density/ Consistency Color Material Classification S C C Remarks S-16 National Classification S S Screened mud rotal Classification S S S Screened mud rotal Classification S S S S S S S S S S S S S S S S S S S	ry O	O Sampler BZ	Borehole**	Driller BZ**
S-14 75-76 To-77 Trace silt laminae, wet. SM cuttings. Tan-Gray Silty, micaceous, fine to coarse SM Screened mud rotar SM cuttings. SM cuttings. SM cuttings. SM cuttings. SM cuttings. SM Screened mud rotar SM cuttings. SM Screened mud rotar SM screened mud rotar SM screened mud rotar SM screened mud rotar SM screened mud rotar SM cuttings. SM cuttings. SM cuttings. SM screened mud rotar SM cuttings. SM screened mud rotar SM cuttings. SM screened mud rotar SM cuttings. SM screened mud rotar SM cuttings. SM screened mud rotar O. Brn. Sand with interbedded silt SM cuttings. SM screened mud rotar SM screened mud rotar O. Brn. Sand with interbedded silt SM cuttings. SM Geophysical log Sandy silt	гу О	0		
Tan - Gray Silty, micaceous, fine to coarse SM Screened mud rotar sand with silt laminae, trace to SM cuttings. 80-81 81-82 82-83 S-16 83-84 S-16 84-85 85-86 85-86 Sand with silt laminae, trace to SM cuttings. Silty, micaceous, fine to coarse SM Screened mud rotar Sand with interbedded silt SM cuttings. Sand with interbedded silt SM cuttings. Sand with interbedded silt SM cuttings. Sand with interbedded silt SM Cuttings. Sand with interbedded silt SM Cuttings.		ľ	0	0
S-15 78-79				
S-15 78-79 Gray Silty, micaceous, fine to coarse SM Screened mud rotal sand with silt laminae, trace to SM cuttings. 80-81 Sand with silt laminae, trace to SM cuttings. 81-82 Sand with silt laminae, trace to SM cuttings. 82-83 Sand with silt laminae, trace to SM cuttings. 83-84 Sand with silt laminae, trace to SM cuttings. Sand with silt laminae, trace to SM cuttings. Sand with interbedded silt SM cuttings. Sand with interbedded silt SM cuttings. Sand with silt laminae (O. Brn).				
80-81 81-82 82-83 S-16 83-84 S-16 84-85 84-85 85-86 85-86 85-86 86-87 Sandwith interbedded silt SM cuttings. Sandwith interbedded silt SM Ceophysical log. Sandwith SM Geophysical log.	ry 0	0	0	0
81-82 82-83 S-16 83-84 S-16				
82-83 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 83-84 S-16 Silty, micaceous, fine to coarse SM Screened mud rotal Sm Cuttings. Sand with interbedded silt SM Cuttings. Sandweith SM Geophysical log.				
S-16 83-84 Tan - O. Brn. Silty, micaceous, fine to coarse SM Screened mud rotal Tan - O. Brn. sand with interbedded silt SM cuttings. 85-86 Tan - O. Brn. laminae (O. Brn). SM Searchysical log.				
S-16 83-84 O. Brn. Silty, micaceous, fine to coarse SM Screened mud rotar 84-85 O. Brn. Silty, micaceous, fine to coarse SM Screened mud rotar Tan - O. Brn. Silty, micaceous, fine to coarse SM Screened mud rotar Tan - O. Brn. Iaminae (O. Brn). SM Ceophysical log				
85-86 O. Brn. Sand with interbedded slit SM Cuttings. Tan - O. Brn. Iaminae (O. Brn). SM Sandy slit SM Geophysical log	ry 0	0	0	0
85-86 O. Brn. Iaminae (O. Brn). SM Geophysical log				
1 X6-X7 /				
Gardy Sitt. ML Josephysical log.				
87-88				
88-89				
89-90				
S-17 90-91 Tan- Gray Silty, fine to medium sand and SM ML Mud rotary cuttings				
91-92 sandy (f-m) silt. SM ML and geophysical log	J.			
92-93 Silty, sand. SM Geophysical log.				
93-94	0	0	0	0
94-95				
95-96 Silty, sand. SM Geophysical log.				
96-97				
97-98				
98-99				
99-100				

	91-90																
·	98-99																
	99-100																
													Orilling	g Ar	ea		
Rema	ırks:										В	Backgro	ound	(ppr	n):	0	
			•	•		•		•									
																	_
Conve	erted to V	Vell:		Yes	X	_	No	We	ell I.D. #	t: <u>BP</u> :	S1-T1	T-MW3	08D				



DRILLING RIG:

Tetra Tech NUS, Inc.

Mud Rotary / HSA

BORING LOG

Page	5	of	12

B. Murphy / K. Cronin

PROJECT NAME: Site 1 - Investigation BORING No.: BPS1-TT-MW308

PROJECT NUMBER: 112G02230 DATE: 10/26/2011

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLER:

	mple Depth (Ft.) Blows /			imple Lithology	N	/ATE	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-18	100-101			777		Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	101-102					Tan - Gray	fine sand with silt laminae.	SM ML	cuttings.				
	102-103												
	103-104												
	104-105												
S-19	105-106			1111		Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	106-107					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	107-108					Tan - Gray	laminae						
	108-109												
	109-110												
S-20	110-111					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	111-112					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	112-113					Tan - Gray	laminae						
	113-114												
	114-115												
S-21	115-116					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	116-117					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	117-118					Tan - Gray	laminae						
	118-119												
	119-120												
S-22	120-121			1111		Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	121-122					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	122-123						laminae						
S-23	123-124					Tan - brn	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	124-125					Tan - brn	f. sand, interbedded silt laminae.	SM ML	cuttings.				

	121-122			Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	122-123				laminae						
S-23	123-124			Tan - brn	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	124-125			Tan - brn	f. sand, interbedded silt laminae	SM ML	cuttings.				
Rema	rks:						Drillin Background			C)
Converted to Well:		Yes	X	No Well	I.D. #:	BPS1-TT-MW308D					



BORING LOG

Page	6	of	12

PROJECT NAME: Site 1 - Investigation BORING No.: BPS1-TT-MW308

PROJECT NUMBER: 112G02230 DATE: 10/26-27/2011

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

				Lithology		MATER	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Change	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-24	125-126					Tan - brn	Silty, micaceous, very fine to	ML/S M	Screened mud rotary	0	0	0	0
	126-127					Tan - brn	f. sand, interbedded silt laminae.	ML/S M	cuttings.				
	127-128												
	128-129												
	129-130												
	130-131												
	131-132												
	132-133												
S-25	133-134					Tan-Org. brn	Silty, fine to coarse sand , inter-	SM ML	Screened mud rotary	0	0	0	0
	134-135					Tan-Org. brn	bedded silt laminae, tr.to little	SM ML	cuttings.				
	135-136			MM		Tan-Org. brn	black organic material (lignite).						
	136-137												
	137-138												
S-26	138-139					Tan-Org. brn	Silty, micaceous, medium to coars	SM	Split spoon sample.	0	0	0	0
	139-140					Tan-Org. brn	sand with silt laminae, tr. lignite.	SM					
	140-141												
	141-142												
	142-143												
S-27	143-144	25-30				Gray - White	Silty, micaceous, vf to fine	SM	Split spoon sample.	0	0	0	0
	144-145	50-35				Gray - White	sand with silt laminae, tr. lignite.	SM					
	145-146												
	146-147												
	147-148												
	148-149												
	149-150												

149-150											
							ing A				
Remarks:						Backgroun	d (pp	om):	()	
Converted to Well:	Yes	X	No	Well I.I	D. #:	BPS1-TT-MW308)				



BORING LOG

Page	7	of	12

PROJECT NAME: Site 1 - Investigation BORING No.: BPS1-TT-MW308

PROJECT NUMBER: 112G02230 DATE: 10/27/2011

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

	Sample Depth (Ft.) Blows / Sample Lithology					/ATE	RIAL DESCRIPTION			PID/FID Reading (ppm)				
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Recovery / Sample Length	(Depth/Ft.)	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**	
	150-151													
	151-152													
	152-153													
S-28*	153-154	24-48	1.5		Dense	Tan - Gray	Silty, micaceous, very fine-med.	SM	Split spoon sample.	0	0	0	0	
	154-155	51-54	2.0			Tan - Gray	sand with silt laminae, tr. oxidized	SM						
	155-156						fine gravel.							
	156-157													
	157-158													
	158-159													
	159-160													
S-29	160-161					Tan - Gray	Silty, micaceous, fine to medium	SM	Screened mud rotary	0	0	0	0	
	161-162						sand with silt laminae, tr.oxidized	SM	cuttings.					
	162-163						fine gravel.							
	163-164													
	164-165													
S-30	165-166					Tan - Gray	Silty, micaceous, fine-medium san	SM	Screened mud rotary	0	0	0	0	
	166-167					Tan - Gray	w/silt laminae, tr. Oxidized f. gravel.	SM	cuttings.					
	167-168			MM			Silt and clay	ML CL	Geophysical log.					
	168-169													
	169-170													
S-31	170-171					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0	
	171-172					Gray	silty, very fine to fine sand.	ML/S M	cuttings.					
	172-173						Silt and clay		Geophysical log.					
	173-174													
	174-175			MIII					Drillin					

			$\langle X X X X X X X X X X X X X X X X X X X$,				3					
	173-174															
	174-175															
												Drillin	g Aı	rea		
Rema	ırks:										Backg	round	(ppi	m):	0	
	•															
Conve	erted to W	ell:	Yes	X	_	No		We	ell I.D. #	#: <u>B</u>	PS1-TT-MW	/308D				



BORING LOG

Page	8	of	12

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/27/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

				Sample Lithology		ЛАТЕГ	RIAL DESCRIPTION		ı	PID/FID Reading (ppm)				
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)		Change	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**	
	175-176			1111			Silt and clay		Geophysical log.					
	176-177													
	177-178													
	178-179													
	179-180													
S-32	180-181					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0	
	181-182					Gray	silty, very fine to fine sand.	ML/S M	cuttings.					
	182-183													
	183-184													
	184-185													
	185-186													
	186-187													
	187-188													
	188-189													
	189-190													
S-33	190-191					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0	
	191-192					Gray	silty, very fine to fine sand.	ML/S M	cuttings.					
	192-193													
	193-194													
	194-195													
	195-196													
	196-197													
	197-198													
	198-199			MM			Silt and clay		Geophysical log.					
	199-200						Silt and clay		Geophysical log. Drillir					

1196-18	9/								
197-19	98								
198-19	99		Silt and clay		Geophysical log.				
199-20	00		Silt and clay		Geophysical log.				
					Drilli	ng A	rea		
Remarks:					Backgroun	d (pp	m):	C)
Converted to	Well:	Yes X	No	Well I.D. #:	BPS1-TT-MW308E)			



Page <u>9</u> of <u>12</u>

BPS1-TT-MW308 PROJECT NAME: Site 1 - Investigation BORING No.: PROJECT NUMBER: 112G02230 DATE: 10/27/2011 Delta Drilling J. Ferguson DRILLING COMPANY: GEOLOGIST: DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

Sample Depth (Ft.) Blows / Sample Lithology				/ATEF	ATERIAL DESCRIPTION U			PID/FID Reading (ppm)					
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Change	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**	
	200-201												
	201-202												
	202-203												
S-34	203-204				Tan - Gray	Silty, very-fine to fine sand,	SM ML	Screened mud rotary	0	0	0	0	
	204-205				Tan - Gray	trace black silt laminae.	SM ML	cuttings.					
	205-206												
	206-207												
	207-208												
	208-209												
	209-210												
	210-211												
	211-212												
	212-213												
S-35	213-214				Tan - Gray	Silty, very-fine to fine sand,	SM ML	Screened mud rotary	0	0	0	0	
	214-215				Tan - Gray	trace black silt laminae.	SM ML	cuttings.					
	215-216												
	216-217												
	217-218												
	218-219												
	219-220												
	220-221												
	221-222												
	222-223												
S-36	223-224				Tan - Gray	Silty, very-fine to fine sand,	SM ML	Screened mud rotary	0	0	0	0	
	224-225					trace black silt laminae.	SM ML	cuttings.					

	221-222												
	222-223												
S-36	223-224				Tan - Gray	Silty, very-fine	to fine sand,	SM ML	Screened mud rotary	0	0	0	0
	224-225					trace black silt	laminae.	SM ML	cuttings.				
Rema	ırks:								Drillir Background			C)
Conve	erted to V	Vell:	Yes	Χ		No	Well	I I.D. #:	BPS1-TT-MW308D				



BORING LOG

Page _10_ of _12_

BPS1-TT-MW308 PROJECT NAME: Site 1 - Investigation BORING No.: PROJECT NUMBER: 112G02230 10/27/2011 DATE: Delta Drilling J. Ferguson DRILLING COMPANY: GEOLOGIST: DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

				MATERIAL DESCRIPTION						PID/FID Reading (ppm				
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**	
S-37	225-226					Tan - Gray	Silty, very fine to fine sand	SM	Screened mud rotary	0	0	0	0	
	226-227					Tan - Gray	trace to little silt laminae.	SM	cuttings.					
	227-228													
	228-229													
	229-230													
	230-231						Silt and clay		Geophysical log.					
	231-232						Silt and clay		Geophysical log.					
	232-233													
	233-234					Tan - Gray	Silty, very fine to medium sand	SM	Screened mud rotary	0	0	0	0	
	234-235					Tan - Gray	trace fine to medium gravel.	SM	cuttings.					
	235-236													
	236-237													
	237-238													
	238-239													
	239-240													
S-38	240-241					Dark brn to	Clayey coarse sand, tr. to little	SC GC	Screened mud rotary	0	0	0	0	
	241-242					org brn	clayey fine gravel.	SM GM	cuttings.					
	242-243													
	243-244													
	244-245													
	245-246													
	246-247													
	247-248													
	248-249													
	249-250													
Dama									Drillir					

	_												
	248-249												
	249-250												
									Drilliı	ng A	rea		
Rema	ırks:								Background	(ppi	m):	0	
	-												
Conve	erted to W	/ell:	Yes	Χ	_	No	 Well I.	D. #:	BPS1-TT-MW308D				

Page _11_ of _12_

BPS1-TT-MW308 PROJECT NAME: Site 1 - Investigation BORING No.: PROJECT NUMBER: 112G02230 10/27/2011 DATE: Delta Drilling J. Ferguson DRILLING COMPANY: GEOLOGIST: DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

				N	ЛАТFF	RIAL DESCRIPTION			PID/FII) Rea	ding ((ppm)	
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)		Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness		Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-39	250-251					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	251-252					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	252-253												
	253-254												
	254-255												
	255-256												
	256-257												
	257-258												
S-40*	258-259	25-35	1.5		V. Dense	Tan - Gray	Silty, micaceous, vf to fine	SM ML	Split spoon sample.	0	0	0	0
	259-260	52-35	2.0			Tan - Gray	sand, trace silt laminae, wet.	SM ML					
	260-261												
	261-262						Clay and silt.		Geophysical log.				
	262-263								Geophysical log.				
	263-264	<u>/_</u>							Geophysical log.				
	264-265								Geophysical log.				
	265-266												
	266-267												
	267-268												
	268-269												
	269-270												
	270-271	<u>/_</u>											
	271-272	/											
	272-273	/											
S-41*	273-274	18-23	1.5		V. Dense	Tan - Gray	Silty, micaceous, vf to fine	SM ML	Split spoon sample.	0	0	0	0
	274-275	24-27	2.0			Tan - Gray	sand, trace silt laminae, wet.	SM ML	Drillir				

	212-213													
S-41*	273-274	18-23	1.5		V. Dense	Tan - Gray	Silty, micaceous, vf to fine	е	SM ML	Split spoon sample.	0	0	0	0
	274-275	24-27	2.0			Tan - Gray	sand, trace silt laminae, v	wet.	SM ML					
										Drillin	g Aı	rea		
Rema	rks:									Background	(ppi	m):	C)
	<u>'</u>											•		
	·													
Conve	erted to V	Vell:		Yes	Χ		No	Well I.D	D. #:	BPS1-TT-MW308D				
				•					· •	_				

Page <u>12</u> of <u>12</u>

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/27/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

					RIAL DESCRIPTION		ı	PID/FII	D Rea	ding (ppm)		
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Change	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-36	275-276					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	276-277					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	277-278												
	278-279												
	279-280												
	280-281												
	281-282												
	282-283												
S-37*	283-284	16-22	1.5			Tan- Gray	Silty, very fine to fine sand.	SP	Split spoon sample.	0	0	0	0
	284-285		2.0					SP					
							Bottom of boring = 285'						
-			•	-			•	•	Drillin	_	-		_

Rema	rks:					m 250' to 260'.				Drilli Background	d (pp	m):)
				262 to 266. kture 241' t			6'. Sandpad	ck from 2	262' to	245'. Bentonite pellet s	eal 24	.5 to 2	241.	
Conve	erted to W	/ell:	Yes	Х	-	No	<u> </u>	Well I.	D. #:	BPS1-TT-MW308E)			

Tt	Tetra ⁻	Tech	NUS,	Inc.
----	--------------------	------	------	------

Page <u>I</u> of <u>3</u>

	PRO	JECT	NAM	E:	NW	IRP P	seth	Dage BORING N	lo.:	BPS1-MW309	1\$			
	PRO	JECT		BER:	112G	0253	<u>0</u>	DATE:	et.	11-9-11 J. Birkett				
			i COM i RIG:	rani.		~ 110		DRILLER:	J 1.	J. Gueci				
							ATF	RIAL DESCRIPTION			PID/FII	D Rea	ding ((mag)
T . a	Sample No. and Type or RQD	(Ft.) or Run	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification		Remarks				
Time		U		1			light Bin	F M 1 11		:	 _			
				-	-		Bin	F-M sand some silt and sm. to large gravel		moist	0	\circ	0	<u> </u>
								44, 73		Past holding to 5' bgs	-			┝
							<u> </u>		<u> </u>	10 5 bg5	-			_
			/_											
		5					ļ		<u> </u>	· · · · · · · · · · · · · · · · · · ·				
1323							lgh!	F-M sand trisill and	<u> </u>	Moist	0	O	0	٥
								sm. to ling pebbls						
		10					<u> </u>							Г
1328					1	017	Bra	F-M sand some sm. to mai		moist	0	0	0	5
		***************************************		,	1			F-M sand some sm. to mai pebbles tr. C. sand and silt	 		Ħ			ř-
		4.		,	1						+	\vdash	\vdash	┢
											+		H	┢
							<u> </u>	***************************************	-		+		\vdash	┢
. Andrew		15					M ∂CI			Ţ	╁			<u> </u>
1333	<u> </u>		/		-	***************************************	BLV OBS	F-M sand to C. sand, siltand sm. pet	الما الما	moist	10	0	0	<u> </u>
			/					very few largepel			ــــــــــــــــــــــــــــــــــــــ		<u> </u>	<u> </u>
									_		ــــــــــــــــــــــــــــــــــــــ	L	$oxedsymbol{oxed}$	L
														L
		20											<u> </u>	
1337							lighi Bra	M sand and grave(s) Some silt C. Sand		Moist	6	0	0	ن
					1			some silt C. Sand						
					1	****					1			
											\dagger	T		1
		25			1		 		╁		+	 		
	* Whei		oring, ent	ter rock br	okeness.		<u> </u>		.l				<u></u>	<u> </u>
	** Inclu	ide mor	nitor readi	ng in 6 foo	ot intervals	@ borehole.	Increase	e reading frequency if elevated reponse 309 For detribed bor 509 Wat T NO Well I.I	read.	Drilli	ng A	rea		5
	нет	arks:	Cutti 41/4	<u> 175 × 1</u>	ogged Sign	1 500	<u>M</u> V	53091) tor detailed box		ava abackground	ı (bb	m):	<u> </u>	<u>ۍ</u> د
	Conv	/erte/	elved to Wi	30 10	rd ava	erd tack	weld	No Wall I) #·	BPSI-MW	209	<u> </u>		
	JUIN			- 111	1 53	-	-		υ. π.	TO TOUT	<u>, — \</u>	-F-		

(Tt	Tetra Tech NUS, Inc.
-----	----------------------

Page ___of __3

	PRO	JECT	NAMI	E:	NW	IRP P	seth	BORING N	lo.:	BPSI-MW309	\$		······································	···	
	PROJECT NAME: PROJECT NUMBER: DRILLING COMPANY: DRILLING RIG:				Del	ta	<u>so</u>	GEOLOGI	ST:	11-9-11 : J. Birkett					
						Failing 110 DRILLER: J. Gueci									
							ATEF	1	PID/FII	D Rea	ding ((ppm)			
Time	Sample No. and Type or RQD	(Ft.) or Run	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**	
1340		<u> </u>					lisht Bin	M-C sand and fravely 19)		Moist	٥	٥	0	Ô	
					Į.		LJIK								
										Collect gallon Zig lock of soil cultings from 0-301/bgs					
										from 0-301/205					
		30								Composite@1346					
[344							ligit Brv	M-C Sand and gravel Lr. silt+F. Sand		moist	0	0	ڻ ا	ß	
								tr. silt+F. Yound							
		35													
1348							iight Bin	M-C Sand and grave (Moist	0	৩	0	C	
								dr. silterndf. sand							
		٠.													
		40		,					<u> </u>					_	
1351							Bly	F.M Sard Some smigravil		moist	0	\Diamond	0	0	
								tr. silt					L	L	
				ļ					ļ			ļ	ļ	<u> </u>	
) <u></u>					L			<u> </u>	
		45					~ C		ļ					<u> </u>	
1355							BW GB	F-M Sand tr. 3M, to med pebbles and siff		Moist	0	C	0		
								learners and 2011			<u> </u>	<u> </u>	_	lacksquare	
			4						_		_	<u> </u>	<u> </u>	igspace	
		5.		ļ							-		ļ	<u> </u>	
		50			<u> </u>						<u> </u>				
	** Inclu	ide mon	_				Increase <u>etail</u>	e reading frequency if elevated reponse	read.	Drillir Background				۵	
	Conv	/ertec	to We	ell:	Yes	×		No Well I.C). #:	BPSI-MW3	09	45			

TE	Tetra	Tech	NUS,	Inc.
----	-------	------	------	------

Page <u>3</u> of <u>3</u>

	PROJECT NAME: NWIRP Bethpage PROJECT NUMBER: 112602230								BORING N	0.:	BPSI-MW309\$ 11-9-11 J. Birkett						
	PRO	PROJECT NUMBER: 1176							DATE:	ът.	11-9-11						
		DRILLING COMPANY: De DRILLING RIG:				ng 110		······································	DRILLER:	٥I:	J. Birkett						
	חוחו	LING	i nia.		taile	ng NO					3. Crue cî PID/FID Reading (p						
	Sample No. and Type or RQD	(Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval			RIAL DESCRIP		U s c s *	Remarks	Sample					
Time	<u> </u>	స్తం					ola		n, to med)			_		$\overline{}$	_		
1357							BIL	FM sand to be	ebbles and sitt		Moist	0	0	0	0		
		55															
1400							Bin	F-M sand tr	(sm. to med) Delphies and sil	-	Moist	0	0	0	O		
											•						
		60															
1404							Bin	F-M sand to	C. Sandandsilt		Moist	0	C	0	ු		
		š .															
					EOB						Arillar notes the						
		65			63°b95	***************************************					driller notes the Start of a kicket 63'bg S						
													П				
				1													

													П				
													Г				
	<u> </u>																
				er rock bro			I	ı			·	<u>.</u>		L			
	** Inclu Rem	de mor arks:	itor readi	ng in 6 foc	ot intervals			e reading frequency if	elevated reponse	ead.	Drillir Background				0		
		٠.١٠٠٠		- 411 (, h	ye 70	1 00	5.0017				\r\	,-		_		
	Conv	/ertec	to We	ell:	Yes		_	No	Well I.E). #:	BPSI-MW3	09	\$				

Æ	Tetra Tech NUS, Inc.
---	----------------------

Page <u>1</u> of <u>7</u>

		ROJECT NAME: NWIRP Buthpage					Dag?	BORING N	No.: BPS1-MW3097 11-7-11							
	PHU	PROJECT NUMBER: NAGORASO PRILLING COMPANY: Delta						DATE:	DATE: 11-7-11 GEOLOGIST: J. Birkett							
			RIG:	i Alvi.	Failin			DRILLER:								
						7	ATE	RIAL DESCRIPTION	<u></u>							
	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks			Borehole**			
Time 1115		0					Brn	T		\	U	0	0	 		
нір		<i>U</i>	-					F-C sand some silt and public		dry		Н	O 4	\vdash		
			\leftarrow							Post-hole digto5/)S					
						<u> </u>						\vdash				
1125		5		<u> </u>								\vdash				
114)		2					Bro	F-C sandsoms lift and sm. to Ly Reply		moist	<u>د</u>	0	0	0		
								Wanty				П				
						****** ******************************										
		16			1											
1136							Brn	FC sand some situal probles		moist	\mathcal{O}	٥	Ô	Ó		
•								•								
		4.														
		15														
1135							Bir	FC sand some silt and pobbles		moist	0	٥	0	٥		
								•								
		1												L		
		<u>ک</u> ھ														
1140							Ben	F-M Sand some silt in publics		moist	0	0	0	U		
			_													
		25														
		de mon	itor readi Culf	inas lo	ot intervals	See Mu	1309	e reading frequency if elevated reponse Sor detailed logs with	1 ga		(pp			, C		
	Conv	/erter	to We		Yes	`X		No Well I.E) #	RPS1-MW309	τ					

Page 2 of 7

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: N2602230 BORING No.: BPSI-MW309 I DRILLING COMPANY: Delta GEOLOGIST: J. Birkett Failing DRILLING RIG: 110 DRILLER: J. Gueci MATERIAL DESCRIPTION PID/FID Reading (ppm) Lithology Sample Depth Blows / Sample U No. (Ft.) 6" or Recovery Change s Soil Density/ or RQD (Depth/Ft.) Borehole** С Sample Driller BZ* Consistency Remarks Type Run (%) Sample or Color Material Classification S or RQD OF No. Screened Length Rock interval Hardness 25 Time Ora Brn F.M Sand some silt MOIST D 00 1145 tr. pebbles and C. sand 30 M Sand Some Siltand Found 600e On Bon 1150 Moist tr. pebbles and C. Sand Sm. tolty 35 OraBra M. sound somesilt and F. sound 1155 tr. pebblis and Esond dob moist Цò OF Brn F-M sand tr. silt, Cosand, and small tomed Publics 0000 1307 Moist 45 F-M sand tr. siltand C. sond very few sm. pebbles 0000 1310 ONBIN moist When rock coring, enter rock brokeness. **Drilling Area** ** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read. Background (ppm): 〇, こ Remarks: Converted to Well: Well I.D. #: BPSI-MW309I Yes

Page 3 of 7

	PRO	JECT		E: DED:	NWIR	<u>P Beth</u> 2230	page	BORING N	10.:	BPSI-MW309I 11-7-11 J. Birkett				
	DRIL	LING	COM	PANY:	Delta	7 A A DU		GEOLOGI	ST:	J. Birkett				
			RIG:			5110		DRILLER:		J. Gueci				
ri.						M	ATE	RIAL DESCRIPTION			PID/FII	D Rea	ding ((ppm)
	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
Time 1315						Op	Bin	F-M sand tr. siltand C sand	T	Moist	0	0	0	0
150			$\overline{}$				12/1/2	very few sm. to med. peobles	\vdash	MOISI				۲
									 					<u> </u>
									\vdash					┢
	_	55	-			<u> </u>			 					
1319	_	رد	$\overline{}$			Ďto.	Binde	F.M sand to siltands, sand		NA \-1	0		0	h
וטוי	· · · · · ·		_					very few sn. to med pebblis		Moist	O	0		F
								*	-					
									 					
		66									<u></u>			-
12/13		ωg				Ar.	<i>D</i> ~	F-M sound for to some sm. pebbl	rk	. ~ 1 1		Δ.	_	
1323				-			2710	tr- Silland C-soud	1	moist-towet	O	\Diamond	\circ	
		<		-					-			-		┢
	***************************************									D. D.		 		<u> </u>
		6 5				···········			-	Driller notes clay around 64 bys		\vdash		<u> </u>
		65		,		CR/s	REN	F.M. sand by to some sitt	1			-		_
1329					<u> </u>			F-M sand tr to some silt very fow pebble	-	wet	0	0	0	P
	<u> </u>			ļ			rakt	► AA \	\vdash			_		<u>_</u>
				ļ			light Bin	F-M sand some silt very few piddies	-	Wet	0	P		0
	<u> </u>	J		-				, (-			┝	_	├
1000		70					1.31				<u> </u>	 		Ļ.
1333						Annual	1134,	F-M Sand Some silt tr. C. sound very few Publics		Wet	0	0	0	
				-				m or small very very proper	<u> </u>			<u> </u>	_	╀
				ļ					<u> </u>			<u> </u>		_
				7	_							<u> </u>		<u> </u>
		75		<u> </u>	<u> </u>							<u> </u>		
	** Inclu	de mor	itor readi				Increase	e reading frequency if elevated reponse	read.	Drillir Background).C
	Conv	ertec	to We	ell:	Yes	×		No Well I.I	D. #:	BPSI-MW30	٩I			

Page <u>4</u> of <u>7</u>

BORING No.: <u>BPS1-MW309I</u> DATE: <u>II-7-II</u> PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112602230 GEOLOGIST: J. Birket DRILLING COMPANY: Della Failing 110 DRILLING RIG: DRILLER: J. Gueci MATERIAL DESCRIPTION PID/FID Reading (ppm) Depth Blows / Sample Lithology U Sample Change No. (Ft.) 6" or Recovery S Soil Density/ Borehole** and or ROD (Depth/Ft.) Sampler BZ Driller BZ* С Sample Consistency Run Sample Remarks Type Color Material Classification S or RQD Screened OΓ Length Rock Interval Hardness Time 75 F-M sand some silt Ó 1339 wet 0 0 very tensimonly pebbles Drillers notes a small kicket 76 30 M-C sand some siltand Fsom 1343 000 0 wet 25 M-C sand some silted very few sm. perbles 1347 wet 90 M sand some siltant Frank 1352 wet 0 00 very few son lebbles 95 F-Msand some silt-andday 1356 00 0 wet tri C. sand and sm. pebbles Sticky cultings Filed bucket of Front end loader driller leave to put in rall off 100 When rock coring, enter rock brokeness. **Drilling Area** ** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read. Background (ppm): 0.0 Well I.D. #: BPSI-MW309I Converted to Well: Yes No

Page <u>5</u> of <u>7</u>

	PRO	JEC1	NAMI NUM	E: BER:		2P Bet	hpere	BORING N DATE:	10.:	BPS1-MW309I	-			
			i COMI i RIG:	PANY:	Dell Failin			GEOLOGI DRILLER:		J. Birkett J. Guei				·
54 ·	D			<u> </u>	1 Million		ATER	RIAL DESCRIPTION			PID/FII) Rea	dina ((maa
!	Sample No. and Type or RQD	(Ft.) or Run	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks				
Time		100		1			13.4.1	F.A. 1 33 /	<u> </u>		_			
1409			\leq				814	.F.Msand some sitt/clay tr. C. sand and sm. Pobbles		wet sticky	0	Ô	0_	٥
			\angle					tr. C. sand and sm. Yendles	<u> </u>	· · · · · · · · · · · · · · · · · · ·				
			/			:		,	<u> </u>					
		105		<u>,</u>										
1435							iight Din	F-M sand some silt/clay		wet sticky	ပ	0	0	<u>ර</u>
								tr, C. Soude		•				
	,													
		No												
1439							light	silty F-M sand tr. c. sand		wet strckx	0	0	0	O
in a		***************************************					178			f				Ĭ
		4							1					
									 					
		115			1									
1444		.,,					light Bin	silty F-M sandtic C sand		wet a	5	$\overline{\wedge}$	0	0
,							Div	2017	<u> </u>	- 	 	=		
				,					 					
				,		******						\vdash		
,											<u> </u>			
		120		1			light Bin	11 500 11 601	+	1-	┢	_	_	_
1451							Bin	silty F.M sandtr. C. Sand	+	Wet	\cup	\Box	0	1
				1					\vdash		├	┢	\vdash	
									┼┈		<u> </u>	<u> </u>		<u> </u>
				,					-		<u> </u>	<u> </u>	<u> </u>	-
	* 14/6	125	20102 201						<u> </u>			<u> </u>		<u> </u>
	** Inclu	ide mor	itor readi	er rock brong in 6 foo		@ borehole.	ncrease	e reading frequency if elevated reponse	read.	Drillir Background				D
	Conv	/erte	to We	ell:	Yes			No Well I.I	D. #:	BPSI-MW30	9 J			•

Page <u></u> of <u>7</u>

			NAM NUM	Ŀ: BER:	112G	17 15et 02230	hpag) (11-7 11 and 11		[[
	DRIL	LING	COM		Delt	^				GEOL	ogis	T:]	11-7 11 and 11 1. Birkett				
	DRIL	LING	RIG:		Foul	ing 110				DRILL	ER:		J. Gueci	···········			
	Sample	Depth	Blows /	Sample	Lithology	<u> </u>	ATE	RIAL DE	SCRIP	PTION		u	;	PID/FIC) Rea	ding ()	ppm)
Time	No. and Type or RQD	(Ft.) or Run	6" or RQD (%)	Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Color	Ma	terial Clas	ssification	***************************************	0 8 0 8 0 8 8	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
Tim 1455							light Bin	silty	=M s	and the C	San		cuttings worter	0	0	0	0
							19419						cuttings worter content increasing				
													U# E.				
11-7-11		130											<u></u>				
11-8-11							light	silty	FM:	sand			wet	0	0	0	0
0735																	
נמיע																	
		135															
0741							iight Bra	silty	, F-M	sand			wet	0	٥	0	٥
		ć.															
		140															
0746							light Bra	F-M	sand	some s	511-		wet	0	0	0	0
																	L
		145															
0750						-14.	hight Bro	F-M	sand	some sil	+		wet	Ŏ	0	0	0
														<u> </u>			
		V50		1													
	** Inclu Rem	^{de mor} arks:	itor readi See	First	ot intervals Page	@ borehole.	Increase	e reading fro	equency if				Drillir Background	(pp	m):		۵,
	Conv	ertec	to W	ell:	Yes	X		No		We	ell I.D.	#:	RPSI-MW30	TP			

BORING LOG

Page <u>7</u> of <u>7</u>

	PRO	JECT	NAMI	E: BFR:	NWIR	P Be	thpa	ge BORING DATE:	No.:	BPS1-MW3097	Ξ	······································		
	DRIL	LING	COM	PANY:	Delta	Fea		GEOLOG	iIST:	J. Birkell				
	DRIL	LING	RIG:		Failing	110		DRILLER	:	J. Gueci				
• •	Sample No.		Blows /	Sample	Lithology	<u>N</u>	IATER	RIAL DESCRIPTION	U		PID/FII	D Rea	ding (ppm)
Time	and Type or RQD	(Ft.) or Run No.	RQD (%)	Recovery / Sample Length	Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
0753		1					light Bin	F-M sand some silt		wet	0	0	0	0
0100							776	1 1 P 3000 SOME SITE	_)	
		155		-			1111							
0758						<u> </u>	lighit Bra	F-M sand some silt	-	wet	0	٥	C	0
				,							<u> </u>			┝
		160												T
0263							light Bin	FM sand some silt		wet	0	0	Ü	0
										unload cultings				
		*									igspace			
		1							+		\vdash			
0819	., 	165					light Bin	F-M Sand some silth. Csa	_		0	0	0	늣
Opti		<u> </u> 		,	!		ubin.	11. define solde 241.14 C24	ifa .	<u>wet</u>				
								•••••••••••••••••••••••••••••••••••••••						
]									
		170							4		<u> </u>			
					EOB 170'bg				\perp		<u> </u>			<u> </u>
									-		-	<u> </u>		<u> </u>
											\vdash			
		175									H			
	* Wher	l	oring, ent	er rock bro	okeness.								<u> </u>	
					ot intervals of		Increase	e reading frequency if elevated repons	e read.	Drillir Background				0
	Conv	ertec	to We	ell:	Yes	<u> </u>		No Well I	.D. #:	BP51-MW30	993			



BORING LOG

Page _1__ of _12__

PROJECT NAME: Site 1 - Investigation BORING No.: BPS1-TT-MW309
PROJECT NUMBER: 112G02230 DATE: 10/11/2011

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson
DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

	IING KIG.			IVIGO IXC	nary / no		DRILLER.		B. Mulphy / K. Clo				_
					N	ЛАТЕР	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, medcoarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2						trlittle, med. Gravel,moist.	SM	BPS1-TT-MW309-0005				
	2-3												
	3-4												
	4-5												
S-2	5-6					Dark Brn	Silty, medcoarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7						trlittle, med. Gravel,moist.	SM	BPS1-TT-MW309-0510				
	7-8												
	8-9												
	9-10												
S-3	10-11					brn.	Silty, medcoarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12						little- med. to coarse gravel,	SM	BPS1-TT-MW309-1015				
	12-13						moist.						
	13-14												
	14-15												
S-4	15-16					brn.	Silty, medcoarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17						little- med. to coarse gravel,	SM	BPS1-TT-MW309-1520				
	17-18						moist.						
	18-19												
	19-20												
S-5	20-21					brn.	Silty, medcoarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22						little- med. to coarse gravel,	SM	BPS1-TT-MW309-2025				
	22-23				moist.								
	23-24												
	24-25												

						Drilling Area_	
Remarks:	Set 8" I.D.	Sch. 40 steel surfa	ace casing	to 25' below ground s	urface.	Background (ppm):	0
•	12" ID HSA	borehole to 25' B	GS, annula	ar space filled with be	ntonite at base. Soil backfill above.		
Converted to W	ell:	Yes	X	No	Well I.D. #: BPS1	I-TT-MW309D	
		-					



BORING LOG

Page	2	of	12
_			

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230

DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309

DATE: $\frac{10/13/2011}{\text{J. Ferguson}}$

DRILLER: B. Murphy / K. Cronin

					N	ЛАТЕР	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-6	25-26			XXXX		Tan- Lt. brn.	Fine to coarse sand and	SM/G M	Screened mud rotary	0	0	0	0
	26-27					DIII.	fine to coarse gravel, moist.	SM/G M	cuttings.				
	27-28												
	28-29												
	29-30												
S-7	30-31					Tan- Lt. brn.	Silty, medcoarse sand,	SM/G M	Screened mud rotary	0	0	0	0
	31-32			8888			little- med. to coarse gravel,	SM/G M	cuttings.				
	32-33						moist.						
	33-34												
	34-35												
S-8	35-36			 		Tan- Lt. brn.	Silty, medcoarse sand,	SM/G M	Screened mud rotary	0	0	0	0
	36-37			XXXX			little- med. to coarse gravel,	SM/G M	cuttings.				
	37-38						moist.						
	38-39												
	39-40												
S-9	40-41			XXX		Light brn.	Silty, medcoarse sand,	SM/G M	Screened mud rotary	0	0	0	0
	41-42			XXXX			little- med. to coarse gravel,	SM/G M	cuttings.				
	42-43						moist.						
	43-44												
	44-45												
S-10	45-46					Tan	Fine-coarse sand,	sw	Screened mud rotary	0	0	0	0
	46-47						little- med. to coarse gravel,	SW	cuttings.				Ш
	47-48						moist.						
S-11*	48-49	12-16				Tan	Silty, medcoarse sand, wet.	SM	Split spoon sample	0	0	0	0
	49-50	18-20						SM					

				Drilling Area	
Remarks:				Background (ppm): 0	
Converted to Well:	Yes	Χ	No	Well I.D. #: BPS1-TT-MW309D	



BORING LOG

Page <u>3</u> 0	of _	<u>12</u>
-----------------	------	-----------

PROJECT NAME: Site 1 - Investigation BORING No.: BPS1-TT-MW309

PROJECT NUMBER: 112G02230 DATE: 10/13/2011

DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson

DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

		1				MATER	RIAL DESCRIPTION			PID/FI	D Rea	ding ((mgg
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-12	50-51			XXXX		Light brn.	Fine to coarse sand and	SM/G M	Screened mud rotary	0	0	0	0
	51-52			XXXX			fine to coarse gravel, moist.	SM/G M	cuttings.				
	52-53												
	53-54												
	54-55												
S-13	55-56					Tan- Lt. brn.	Fine to coarse sand and	SP	Screened mud rotary	0	0	0	0
	56-57						fine to coarse gravel, moist.	SP	cuttings.				
	57-58								-				
S-14*	58-59	14-17				Tan- Org. brn.	med. to coarse sand,	SP	Split spoon sample.	0	0	0	0
	59-60	19-23					moist to wet.	SP					
	60-61												
	61-62												
	62-63												
	63-64												
S-15	64-65					Tan - brn.	Sandy (fine to med.) Silt	SM	Screened mud rotary	0	0	0	0
	65-66					Tan - brn.		ML SM	and geophysical log.				
	66-67					Tan - brn.		ML SM	. ,				
	67-68					Tan - brn.		ML SM					
	68-69					Tan - brn.		ML SM					
	69-70												
S-16	70-71					Tan - brn.	Micaceous, fine to coarse sand	SM	Screened mud rotary	0	0	0	0
	71-72						with silt laminae, wet.	SM	cuttings.				
	72-73			*C*C*C*C*C*C*C*C*C*					Ŭ				
	73-74												
	74-75												

Remarks:				Drilling Area Background (ppm): 0
Converted to Well:	Yes	X	No	Well I.D. #: BPS1-TT-MW309D



BORING LOG

Page	<u>4</u>	of	<u>12</u>
------	----------	----	-----------

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW309 112G02230 10/13/2011 PROJECT NUMBER: DATE: DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

					N	MATERIAL DESCRIPTION				PID/FII	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-14	75-76					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	76-77						sand with silt laminae, tr. to	SM	cuttings.				
	77-78						little lignite						
	78-79												
	79-80												
S-15	80-81					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	81-82					<u> </u>	sand with silt laminae, tr. to	SM	cuttings.				
	82-83						little lignite						
	83-84												
	84-85												
S-16	85-86					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	86-87						sand with silt laminae, tr. to	SM	cuttings.				
	87-88						little lignite						
	88-89												
	89-90												
S-17	90-91					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	91-92					-	sand with silt laminae, tr. to	SM	cuttings.				
	92-93						little lignite						
	93-94												
	94-95												
	95-96												
	96-97												
	97-98												
	98-99												П
	99-100												П

* When rock coring, enter rock broke	eness.					
** Include monitor reading in 6 foot in	ntervals @ borehole	. Increase read	ding frequency if elevated	reponse read.	Drilling Area	
Remarks: Background (ppm):			0			
Converted to Well:	Yes	Χ	No	Well I.D. #	: BPS1-TT-MW309D	



BORING LOG

Page 5 of 12	
490 <u> </u>	

Site 1 - PCB Investigation PROJECT NAME: BORING No.: BPS1-TT-MW309 PROJECT NUMBER: 112G02230 10/ /2011 DATE: Delta Drilling DRILLING COMPANY: GEOLOGIST: J. Ferguson DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

					1	MATER	RIAL DESCRIPTION			PID/FII) Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-18	100-101			1111		Tan - Org. brn	Silty, fine to med. sand	ML/S M	Screened mud rotary	0	0	0	0
	101-102						with silt laminae, tr. to	ML/S M	cuttings and gephysical				
	102-103						little lignite		log.				
	103-104												
	104-105												
	105-106												
	106-107												
	107-108												
	108-109												
	109-110												
S-19	110-111					Tan - Org. brn	Silty, micaceous, fine to coarse	ML/S M	Screened mud rotary	0	0	0	0
	111-112						sand with silt laminae, tr. to	ML/S M	cuttings.				
	112-113						little lignite						
	113-114												
	114-115												
	115-116												
	116-117												
	117-118												
	118-119												
	119-120												
S-20	120-121					Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Screened mud rotary	0	0	0	0
	121-122					Ĭ	sand with silt laminae, tr. to	SM	cuttings.				
	122-123						little lignite						
	123-124						Sandy (fine to med.) Silt	ML SM	Geophysical log.	0	0	0	0
	124-125			MM				ML SM					

when rock coning, enter rock brokeness.	
** Include monitor reading in 6 foot intervals @ borehole.	Increase reading frequency if elevated reponse read.

** Include monitor reading in 6 foot i	ntervals @ borehole	e. Increase read	Drilling Area						
Remarks:					Background (ppm):	0			
					_				
Converted to Well:	Yes	Х	No	Well I.D. #	: BPS1-TT-MW309D				



BORING LOG

Page	6	of	12

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW309
PROJECT NUMBER: 112G02230 DATE: 10//2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson
DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

						PID/FII) Read	ding (ppm)				
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	125-126												
	126-127												
	127-128												
	128-129												
	129-130												
S-21	130-131					Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Screened mud rotary	0	0	0	0
	131-132						sand with silt laminae, tr. to	SM	cuttings.				
	132-133						little lignite						
	133-134												
	134-135												
	135-136												
	136-137												
	137-138												
S-22	138-139	15-20				Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Split spoon sample.	0	0	0	0
	139-140	15-20					sand with silt laminae, tr. lignite.	SM					
	140-141												
	141-142												
	142-143												
	143-144												
	144-145												
	145-146												
	146-147												
	147-148												
S-23	148-149	10-12				Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Split spoon sample.	0	0	0	0
	149-150	15-20					sand with silt laminae, tr. lignite.	SM					

When rock coring, enter rock brok	keness.					
* Include monitor reading in 6 foot	intervals @ boreho	le. Increase re	ading frequency if elevate	d reponse read.	Drilling Area	
Remarks:					Background (ppm):	0
Converted to Well:	Yes	Х	No	Well I.D. #:	BPS1-TT-MW309D	



BORING LOG

Page	7	of	12

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW309
PROJECT NUMBER: 112G02230 DATE: 10//2011
DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson
DRILLING RIG: Mud Rotary / HSA DRILLER: B. Murphy / K. Cronin

					N	/ATEF	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151												
	151-152												
	152-153												
	153-154												
	154-155												
	155-156												
	156-157												
	157-158												
	158-159												
	159-160												
S-24	160-161					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	161-162						sand with silt laminae, tr. lignite.	SM	cuttings.				
	162-163												
	163-164												
	164-165												
	165-166												
	166-167												
	167-168												
	168-169												
	169-170												
S-25	170-171					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0
	171-172						silty, very fine to fine sand.	ML/S M	cuttings.				
	172-173			**************************************									
	173-174												
	174-175												\Box
		/						1	1		Ь		<u> </u>

* When rock coring, enter rock brol	keness.					
** Include monitor reading in 6 foot	intervals @ boreho	le. Increase re	eading frequency if elevat	ed reponse read.	Drilling Area	
Remarks:					Background (ppm):)
Converted to Well:	Yes	X	No	Well I.D. #:	BPS1-TT-MW309D	



Page	8	of	12

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309	
PROJECT NUMBER:	112G02230	DATE:	10/14/2011	
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson	
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin	

					N	ЛАТЕF	RIAL DESCRIPTION			PID/FID Reading (ppm)				
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**	
	175-176													
	176-177													
	177-178													
	178-179													
	179-180													
S-26	180-181					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0	
	181-182						silty, very fine to fine sand.	ML/S M	cuttings.					
	182-183													
	183-184													
	184-185													
	185-186													
	186-187													
	187-188													
	188-189													
	189-190													
S-27	190-191					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0	
	191-192						silty, very fine to fine sand.	ML/S M	cuttings.					
	192-193													
	193-194													
	194-195			1										
	195-196			1										
	196-197			1										
	197-198			1										
	198-199			1										
	199-200			1										

* When rock coring, enter rock brok	eness.				
** Include monitor reading in 6 foot	intervals @ boreho	le. Increase re	ading frequency if elevat	ed reponse read.	Drilling Area
Remarks:					Background (ppm): 0
Converted to Well:	Yes	Х	No	Well I.D. #:	BPS1-TT-MW309D



Page	9	of	12

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309	
PROJECT NUMBER:	112G02230	DATE:	10/14/2011	
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson	
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin	

					N	/ATEF	RIAL DESCRIPTION			PID/FI	D Rea	ding ((ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-28	200-201					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	201-202						sand with silt laminae, tr. lignite.	SM	cuttings.				
	202-203												
	203-204												
	204-205												
	205-206												
	206-207												
	207-208												
	208-209												
	209-210												
S-29	210-211					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	211-212						sand with silt laminae, tr. lignite.	SM	cuttings.				
	212-213												
	213-214												
	214-215												
	215-216												
	216-217												
S-30	217-218					Dark brn.	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	218-219					Dark brn.	little to some silt, oxidized, wet.	SM GM	cuttings.				
	219-220												
	220-221												
	221-222												
	222-223												
	223-224												
	224-225												

* When rock coring, enter rock brok	keness.					
** Include monitor reading in 6 foot	intervals @ boreho	le. Increase re	ading frequency if elevat	ed reponse read.	Drilling Area	
Remarks:					Background (ppm):	0
Converted to Well:	Yes	X	No	Well I.D. #:	BPS1-TT-MW309D	



Page	10	of	12
ı agc	<u> 10</u>	O.	

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309	
PROJECT NUMBER:	112G02230	DATE:	10/14/2011	
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson	
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin	

					N	/ATE	RIAL DESCRIPTION			PID/FID Reading (ppm)			
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-31	225-226					Tan - Gray	Silty, very fine to fine sand	SM	Screened mud rotary	0	0	0	0
	226-227						tr. to little silt laminae.	SM	cuttings.				
	227-228												
	228-229												
	229-230												
	230-231												
	231-232												
	232-233												
	233-234												
	234-235												
	235-236												
	236-237												
	237-238												
	238-239												
	239-240												
S-32	240-241					Dark brn. to	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	241-242					org. brn.	little to some silt, oxidized, wet.	SM GM	cuttings.				
	242-243												
	243-244												
	244-245												
	245-246												
	246-247												
	247-248												
	248-249												
	249-250												

* When rock coring, enter rock brok	eness.					
** Include monitor reading in 6 foot	intervals @ boreho	le. Increase re	ading frequency if elevat	ed reponse read.	Drilling Area	
Remarks:					Background (ppm):	0
Converted to Well:	Yes	X	No	Well I.D. #:	BPS1-TT-MW309D	



Page	11	of	12

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309	
PROJECT NUMBER:	112G02230	DATE:	10/17/2011	
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson	
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin	

					N	/ATEF	RIAL DESCRIPTION		ı	PID/FII	D Rea	ding (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-33	250-251					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	251-252					Tan - Gray	fine sand, tr. silt laminae.	SM	cuttings.				
	252-253												
	253-254												
	254-255												
	255-256												
	256-257												
	257-258												
	258-259												
	259-260												
	260-261												
	261-262												
	262-263												
	263-264	/											
S-34	264-265					Tan - Gray	Clayey, micaceous f.sand and	SC CL	Screened mud rotary	0	0	0	0
	265-266					Tan - Gray	sandy, clay.	SC CL	cuttings and geophysical				
	266-267								log.				
	267-268												
	268-269												
	269-270												
	270-271	/											Ш
	271-272												
	272-273					<u> </u>		60					Ц
S-35*	273-274				Stiff	Dark - Gray	Sandy (fine) clay and clayey	SC CL	Split spoon sample.	0	0	0	0
	274-275	24-27				to Gray	fine sand (interbedded).	SC CL					

* When rock coring, en	nter rock broken	ess.					•
** Include monitor read	ling in 6 foot inte	ervals @ borehol	e. Increase readir	ng frequency	if elevated reponse read.	Drilling Area	
Remarks:	Installed 2	" ID Sch 40	PVC Well S	creen fro	m 252' to 262'.	Background (ppm):	0
	#1 Silica s	andpack fro	m 248' to 26	2'.		_	
	4' Bentonit	e pellet sea	l 244' to 268	'. Cetco	bentonite/portland cement a	annular seal to 10' BGS.	
Converted to W	ell:	Yes	X	No	Well I.D. #: I	BPS1-TT-MW309D	

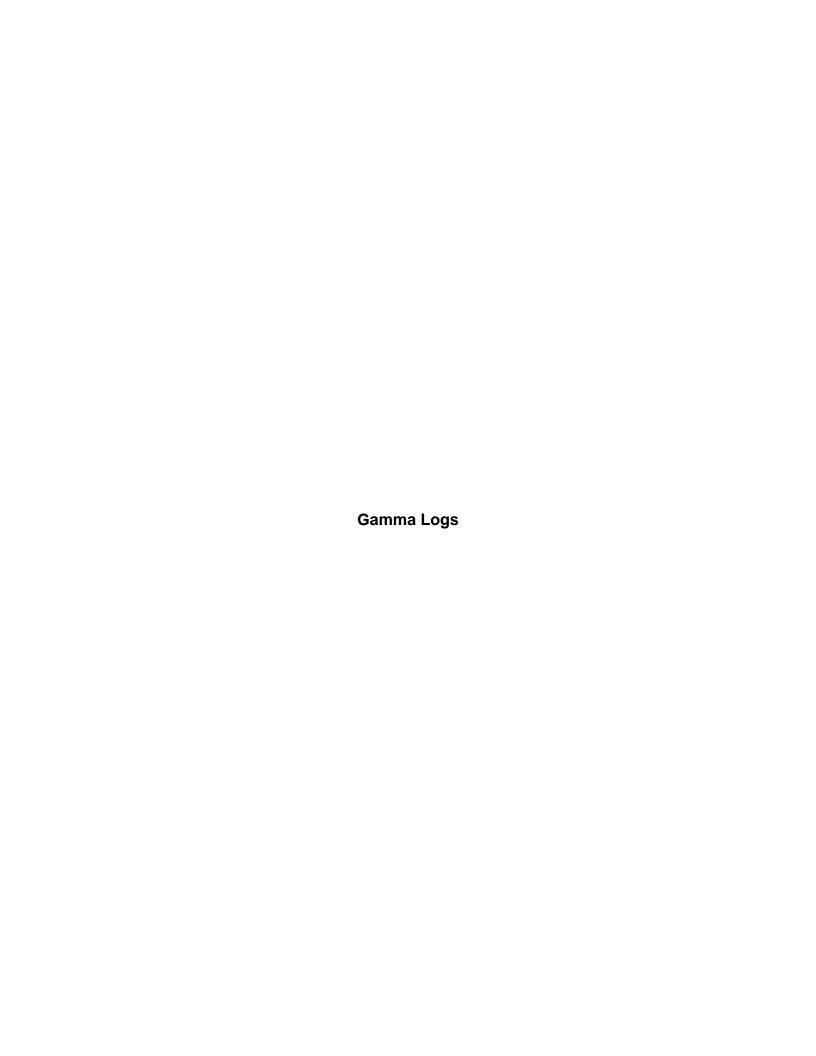


Page <u>12</u> of <u>12</u>

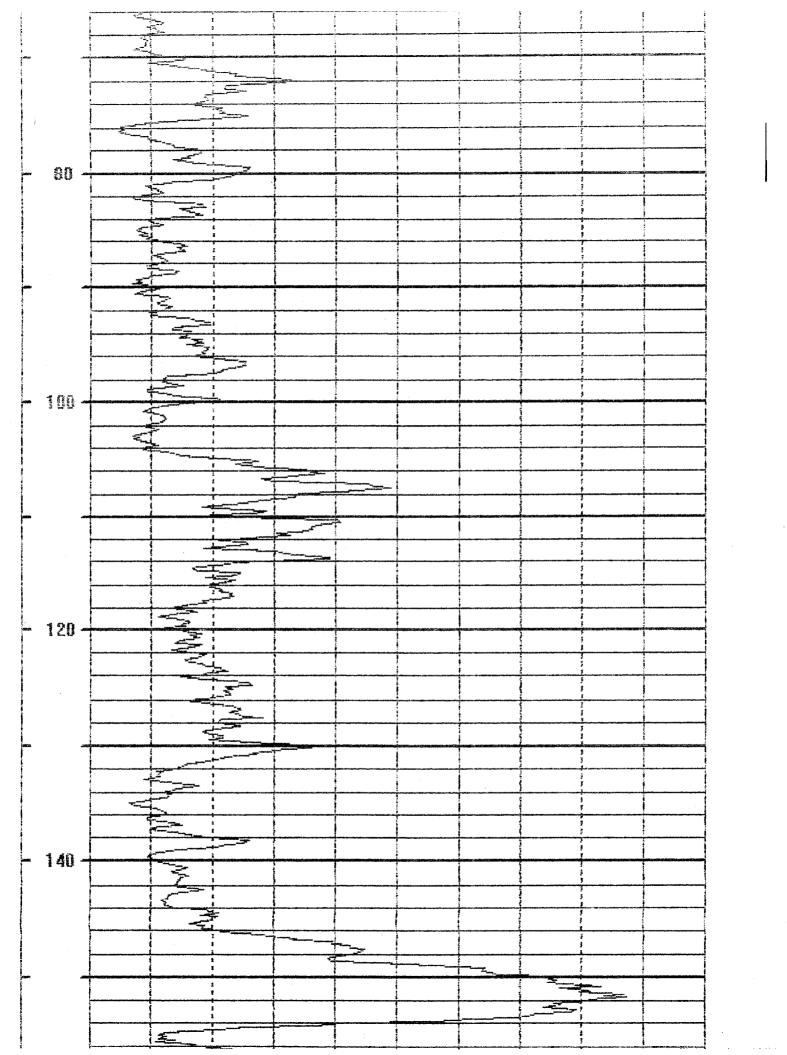
PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309	
PROJECT NUMBER:	112G02230	DATE:	10/17/2011	
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson	
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin	

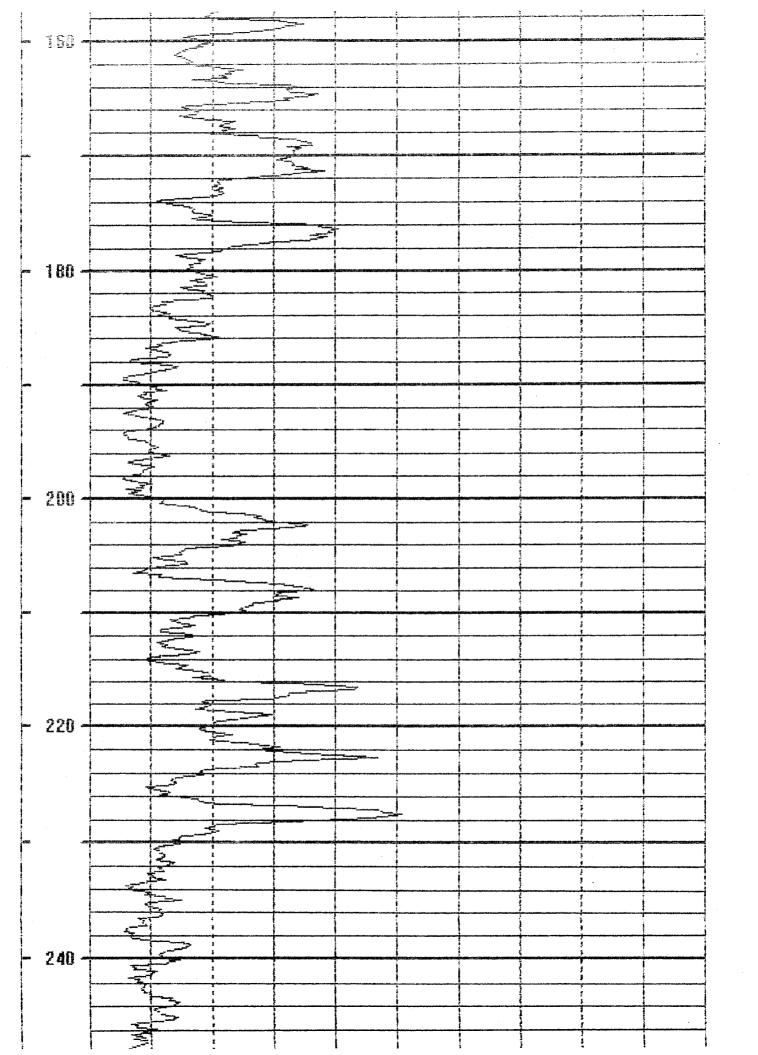
				N	/ATEF	RIAL DESCRIPTION		F	PID/FII	D Rea	ding (ppm)
Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
S-36	275-276				Tan - Gray	Sandy (fine) clay and clayey	SC CL	Screened mud rotary	0	0	0	0
	276-277				Tan - Gray	fine sand (interbedded).	SC CL	cuttings and geophysical				
	277-278							log.				
	278-279						SC CL					
	279-280											
	280-281											
	281-282											
	282-283											
S-37*	283-284	16-22			Tan- Gray	Silty, very fine to fine sand.	SP SM	Split spoon sample.	0	0	0	0
	284-285	29-27			•		SP SM					
						Bottom of boring = 285'						
		-										

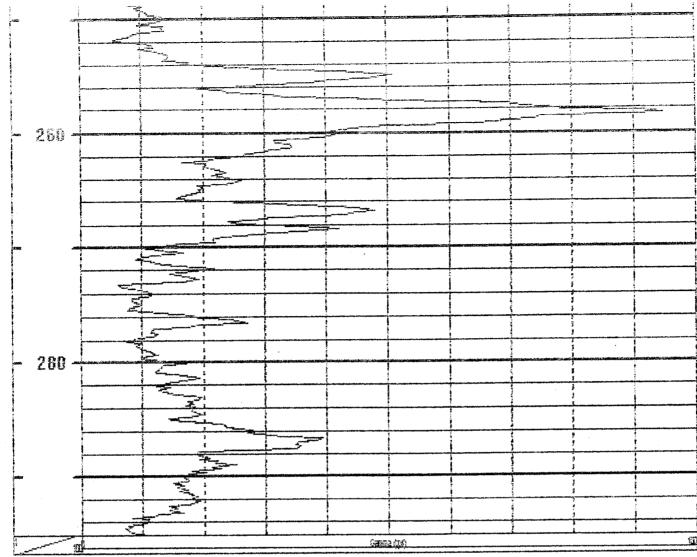
* When rock coring, enter rock bro	keness.								
** Include monitor reading in 6 foot	de monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read. Drilling Are								
Remarks:					Background (ppm):	0			
Converted to Well:	Yes	X	No	Well I.D. #:	BPS1-TT-MW309D				



id:Turdy, Kerin N, Jul Tacidin 10. Clavier and by Markin Mylanem 120 MEE COMPANY: DELTA WELL & PUMP CO., INC. MAIRP BETHPAGE Locator Deoth Driller Deoth Logoer BP-S1-TT-MW305 Well BH Fluid Logged by: 11/17/11 Date MC Witness: J. FERGUSUK File Name 722 20 40 60





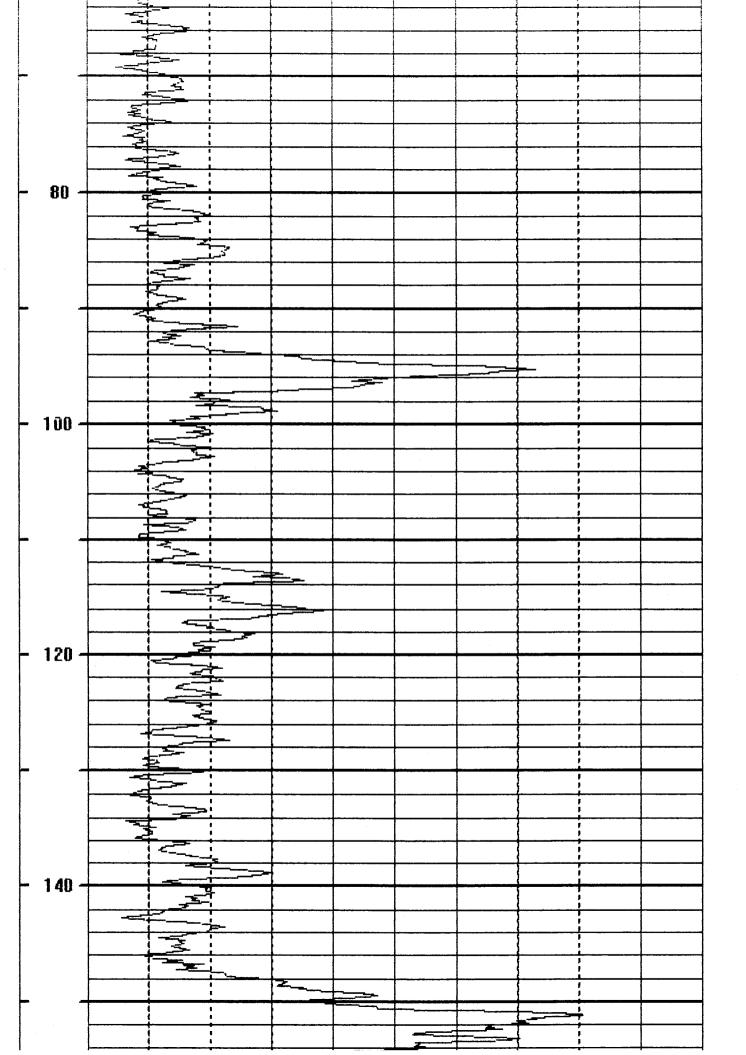


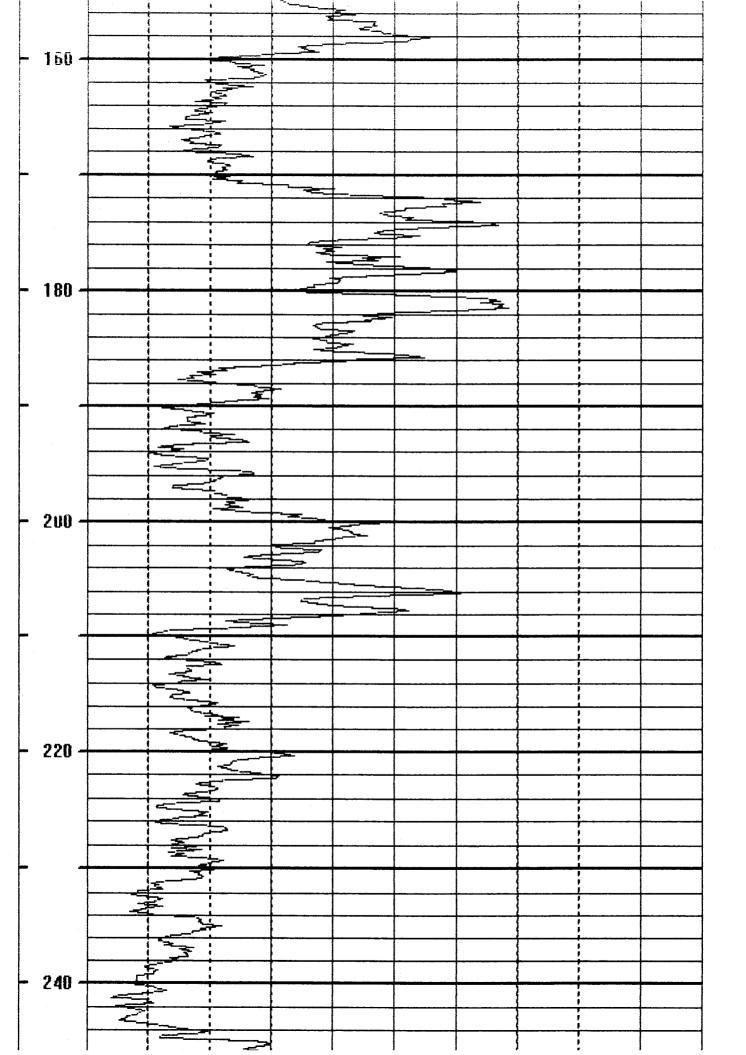
Calc. Trusting threaders to 2011. The 2014. The Collegen and and Autograph and Autographic Collegen and Tourist Edition.

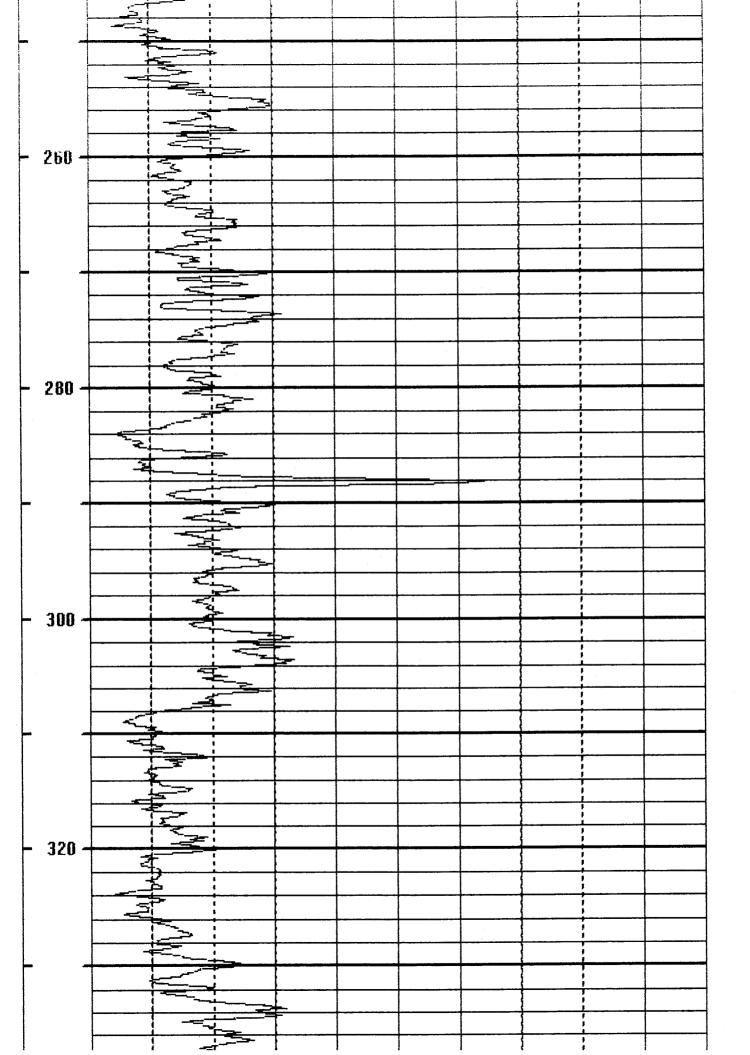
Cell Testing November 20, 2011. The 1885 - PPEL Provints sold they desire they recens the experience appears to the control of COMPANY: DELTA WELL & PUMP CO., INC. Casing NAMES BETHPAGE Location Depth Driller Depth Logger BP-S1-TT-MW356 Well Date BH Fluid Logged by: 11/29/11 cmo File Name 722 WWCE Witness: <u>चित्रास्त्र</u> 20 -40 80 -

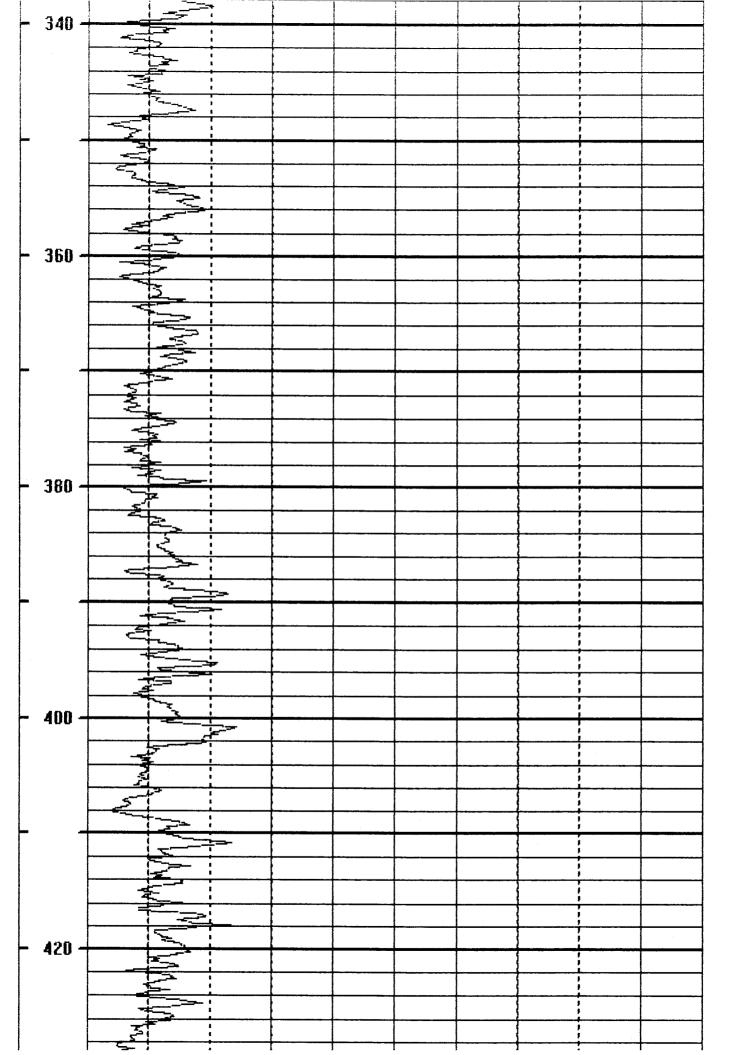
Text Testing distributed Text (Also Fred Consended Serger Wind Asset Display Consends Territories and

		COMPAN	Y: DE	LTA WELL	. & PUMI	P CO., INC.				00
		Location:	MWRF	BETHPAG	E					Casing
Well	BP-S1-	TT-MA/307				Depth Drille Depth Logg	i er	<u> </u>		
D at e	11/07/1	1	BHFluid			Logged by:				
File Nam	ie .	722				Witness:	J. FERG	USOK		
	<u>a</u>	·		1	G	arus tht	T	1	<u> </u>	
0	<u></u>	-	•						; ; ;	
v			1							
		₩ <u></u>	1				<u> </u>		<u> </u>	
			<u> </u>						<u> </u>	
			* !						1	
		-	1 E						j j	
		-) 	
			7						1	
			- i						,	
	•	4	i 						;	
20	-		; ;						!	
20) ;							
									1	
							 		1	
		-							<u> </u>	
									;	
			!				 			
							 			
									1	
				5			1		1 7 1	
		1_==					1	{	; ;	
40	+	5-						1	1 1	
	_		-				1	 	!	
	-5-	-	<u>i</u>						!	_
		_	!					}		
			1			-		[1	
	+	1	<u></u>		— —		1	 	!	-
			5 -	 	-		 	<u> </u>	1	
	-		<u> </u>	[<u> </u>			}	<u> </u>	
	<u></u>	=	<u>i</u>	-			-	}	<u></u>	
		<u> </u>	1 1		ļ				1 #	
60	+===	-	-						1	<u> </u>
- -		خأ		}				}	•	1

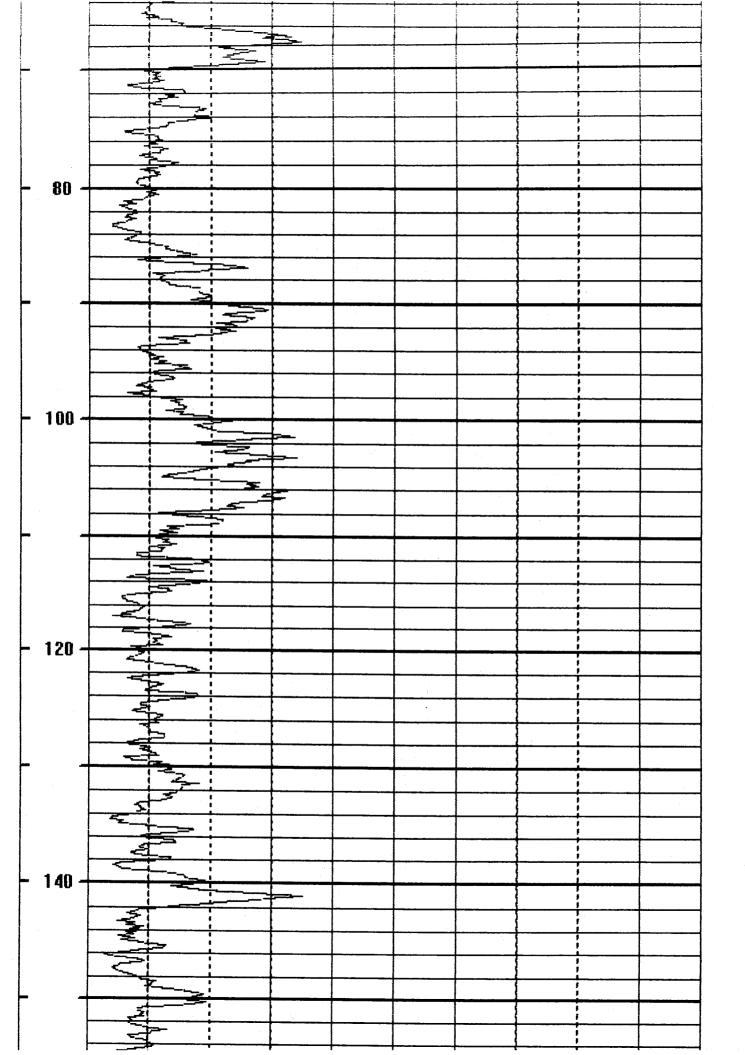


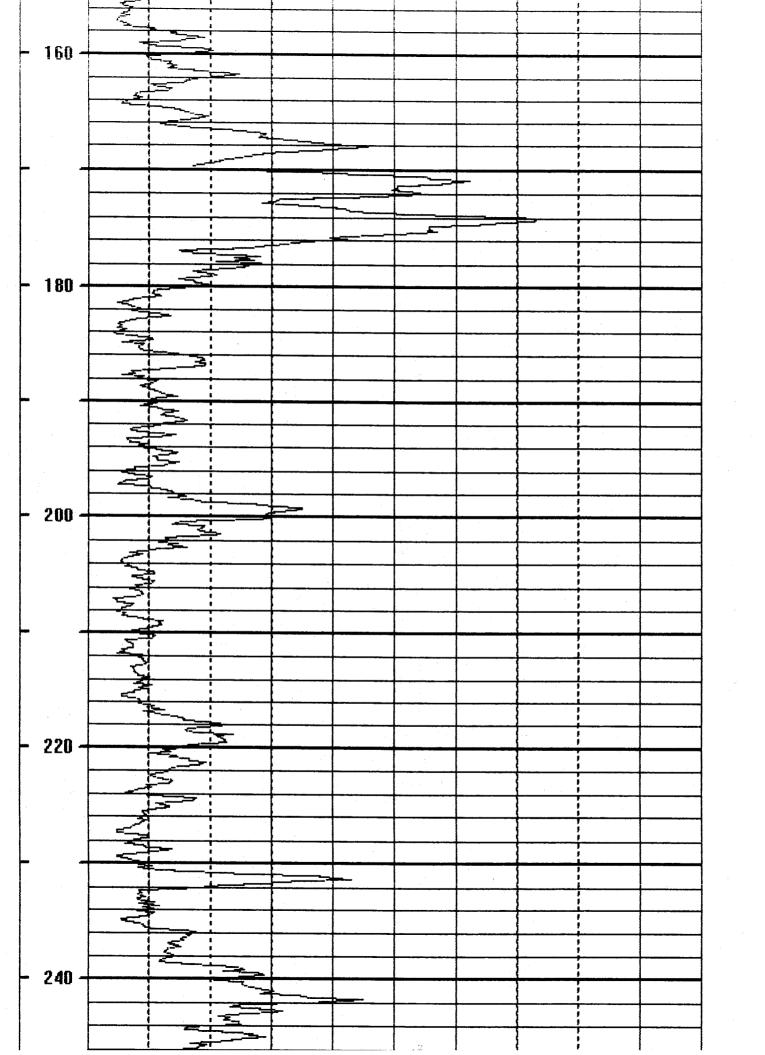


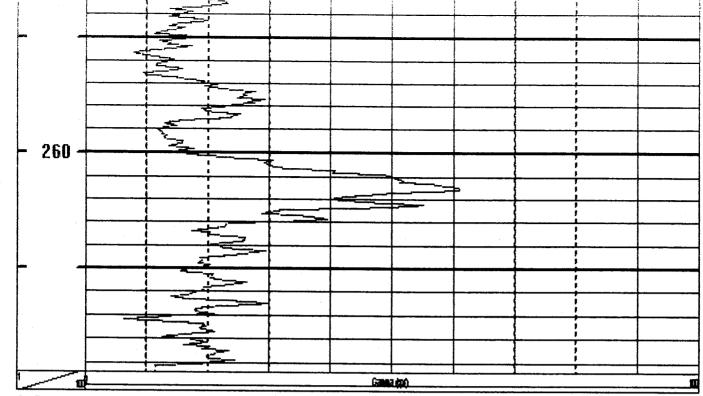




		COMPAN	Y: DELT	A WELL & F	PUMP	CO., INC.				<u> </u>
		Location	MVRP B	ETHPAGE						
Vell	BP-S1-	IT-MA/308	" , , , , , , , , , , , , , , , , , , ,			Depth Drille Depth Logg	f 8F			
)ate	10/27/1		BH Fluid			ogged by:)XIC		***************************************	
ile Nan	ne l	722			1	Vitness:	J. FERG	SUSUKi	T	
						wa (tot)				
0		i	1						; ; ;	
U		1								
	-	<u> </u>							<u> </u>	
	ļ		- !					<u> </u>	 	
		-							-	
	+		·						!	
								}	!	
		\$!			1	 			
	-		7						İ	
20									1	
LU		4								
		<u> </u>							<u>!</u>	
	<u> </u>							ļ ·	<u> </u>	
	-	=======================================	!				<u></u>]		
	+	+===	1					}		
						<u> </u>	-		1	-
								1		
		4_					<u> </u>		!	
40		15				1			;	
40		2	i						1	
			1						;	
	_=	4		· ·] 	
						<u> </u>			!	
	+	<u> </u>						<u> </u>	;	
									; ;	
	حـ ا	4	+						<u>;</u>	
]	†			 			<u>i</u> !	
en	1 3	4							<u>;</u> ;	
60	72	<u></u>							; ;	
			+			 			<u> </u>	



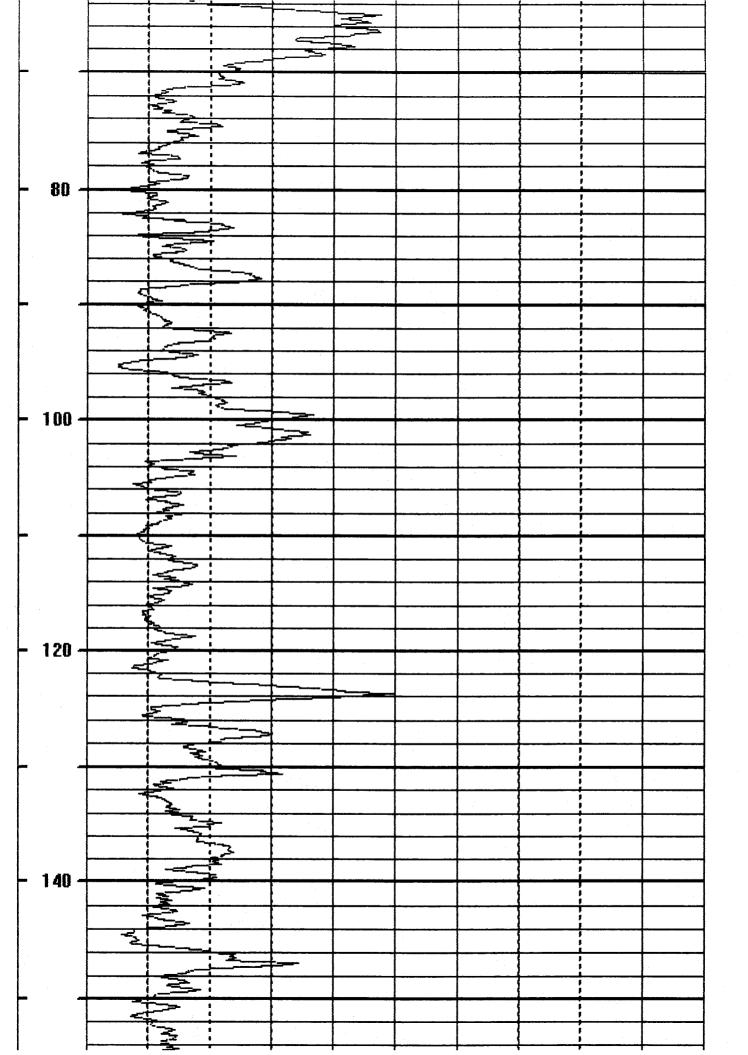


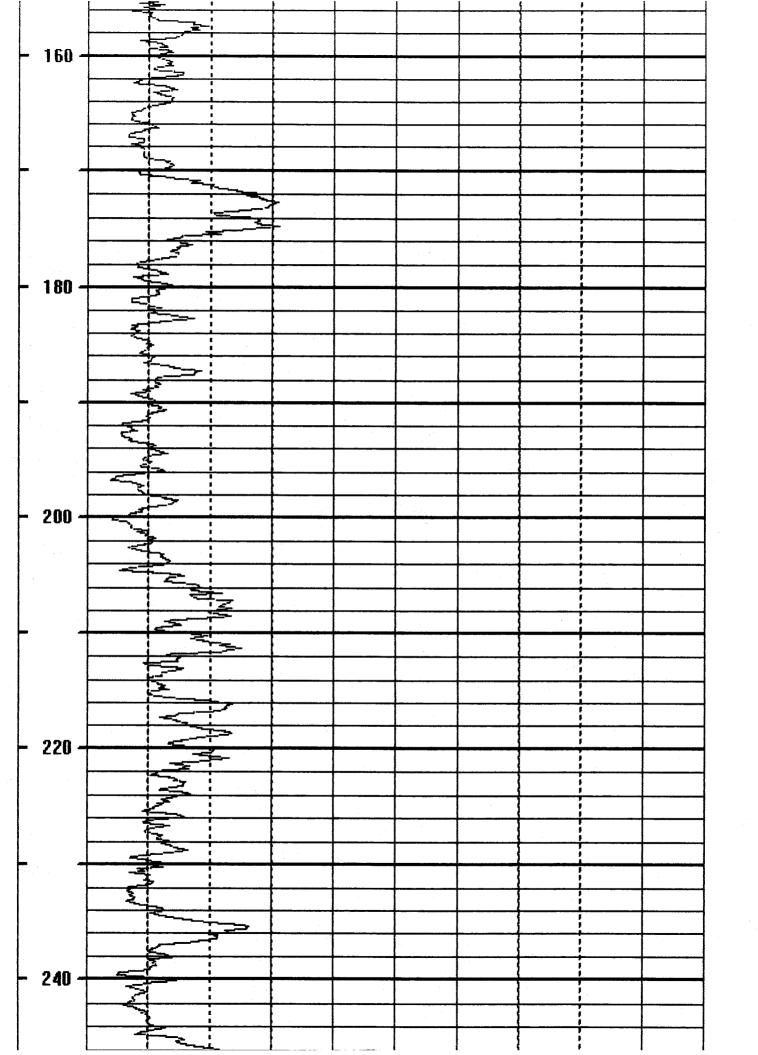


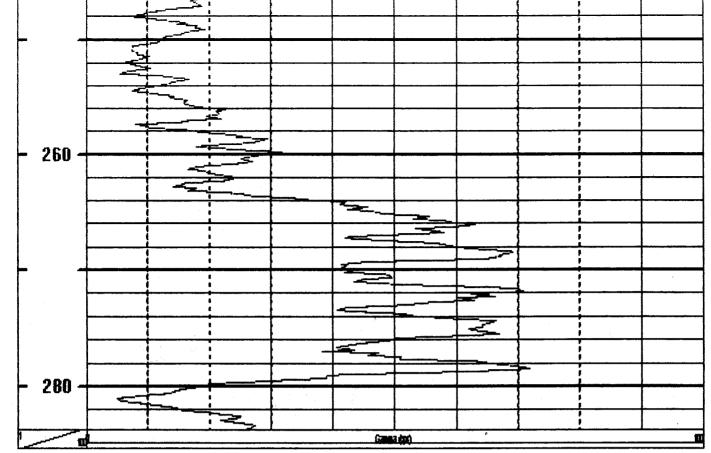
Date: Triusday, October 21, 2011 Thre: 1992 1997, Character and a May Vision in Nation Will Document # 22/MIN/IB.nl

_4

		COMPANY	: DEI	TA WELL	_&PUM	P CO., INC.				0 8
		Location:	NWRP	BETPAGE						Casing
Well	BPSI-TI	T-MAY303							- 10	
Date	10/17/1		6H Fluid			Logged by:				
ile Nam		722				Witness:	J. FERG	·		
	10					ana (p)	V.1 D.0			
0									; ; ;	
U			1						; ; ;	
		1	<u>;</u>						<u> </u>	
		+	-						<u>i</u> !	
						•			1	
								ļ	! !	
				- :					<u>;</u>	
									1	
20			臺				•		; ;	
20			<u> </u>				***			
		12	1					-	<u>;</u> ;	
		ŧ							! ! !	
		3							<u>;</u>	
	~	3	1						!	
			-						; !	
			;				*	1	; ;	
An							<u> </u>		<u>;</u> !	
40		-							! !	
		-]]]	
				·					; ;	
					<u> </u>				; ;	
		4.5							, , , ,	
		4								
	E								<u>; </u>	
		-	:						! !	-
60	+==		ī			-		}	<u>. </u>	







Date: Housing, October 17, 2011 Time: 1222 FSLS: Securior's and Setting (Mahakatan May Document VITT 22 MINUTE at



WELL NO.: <u>MW-3055</u>



OVERBURDEN MONITORING WELL SHEET STICK-UP

	PROJECT BEAUTIME S. 10 1 JAVERUM LOC	CATION BETHEATTE Now YORK	DRILLER J GUERCI
	PROJECT NO. 7/2604230 BOI	RING 8P5/-17MW2055	DRILLING
	DATE BEGUN November 23, 701/ DA' FIELD GEOLOGIST J. FIGUSON	TE COMPLETED NOV 22 2011	METHOD Its llows & rown hogen
	FIELD GEOLOGIST J. FIGUSON		DEVELOPMENT
	GROUND ELEVATION DA	TUM	METHOD
			_
Ξ		- ELEVATION/HEIGHT OF TOP OF S	URFACE CASING:
		PICATION APTOUR OF YOU OF D	varn avar
20/3		- ELEVATION/HEIGHT OF TOP OF R	ISER PIPE:/
87/29/99			
Chr		TWO OF CUDENCE CEAL.	
J.dw	3.4	TYPE OF SURFACE SEAL:	
ACAD: FORM_MWSU.dwg			
3		- LD. OF SURFACE CASING:	
Ë		TYPE OF SURFACE CASING:	
8			
⋖.		21/ d	
		— RISER PIPE I.D.: J" Ø TYPE OF RISER PIPE: <u>Jch. 40</u>	PVP
		— BOREHOLE DIAMETER: 8/4" &	. 115 A
		501(L10LL 51/40L1L111 73/7 9)	model to the land of the land
			- 1
		TYPE OF BACKFILL: (BETO (BET)	ITONITE)
		Cement (Portland) GROO	7
			11 A
ς.		- ELEVATION/DEPTH TOP OF SEAL:	34/1
		- TYPE OF SEAL: BENTONITE PE	Uh Binl
,			
		- DEPTH TOP OF SAND PACK:	38'
			
	2 3 3 3 3 3 3 3 3 3 3	- ELEVATION/DEPTH TOP OF SCREE	EN: 4/3' /
			*** And the Control of the Control o
		— TYPE OF SCREEN: <u>PVに ろch.</u>	<u>46</u>
		SLOT SIZE x LENGTH: 0.010 30	nr = 10'
		I.D. OF SCREEN: 2"	The state of the s
		TYPE OF SAND PACK: #1 Julian	1 SAND
			,
		ELEVATION/DEPTH BOTTOM OF S	CREEN:
		ELEVATION/DEPTH BOTTOM OF S.	AND PACK:/
		BACKFILL MATERIAL BELOW SAND	
	23227		
		ELEVATION/DEPTH OF HOLE: ^	50'/
		LLCANITON DEFIN OF NOLE:	50 /

WELL NO .: MW-305I



OVERBURDEN MONITORING WELL SHEET STICK-UP

	PROJECT NWIRP Bethrage	_ LOCATION Site !	DRILLER Jason Gueci
	PROJECT NUIRP Bethpage PROJECT NO. 11260 2230	DATE COMPLETED //- 29-1/	DRILLING HSA
	DATE BEGUN 11-28 -11 FIELD GEOLOGIST VINCE S	hickory	DEVELOPMENT
	GROUND ELEVATION	DATUM	METHOD
IN IN	A	ELEVATION/HEIGHT OF TOP OF	SURFACE CASING:/
		ELEVATION/HEIGHT OF TOP OF	RISER PIPE: /
07/20/99		ELEVATION/REIGHT OF TOP OF	RISER FIFE:
		TYPE OF SURFACE SEAL:	
WSU.d			
ACAD: FORM_MWSU.dwg		I.D. OF SURFACE CASING: TYPE OF SURFACE CASING:	
ACAD: F		TIPE OF SURFACE CASING:	
		RISER PIPE I.D.: 2 A	inch le 40 PVC
		BOREHOLE DIAMETER: 8 120	h
		TYPE OF BACKFILL: Bester, k	elCenest
		Ceta High Solids bester ite	- / Portland Coment
		ELEVATION/DEPTH TOP OF SEAL	
	,	TYPE OF SEAL: 38" Beden le	Holeplug
		DEPTH TOP OF SAND PACK:	185
	3131313		
		ELEVATION/DEPTH TOP OF SCRI	EEN: / 190'
		TYPE OF SCREEN: Schedule	HD PVC
		SLOT SIZE x LENGTH: 0.01	X 10'
		I.D. OF SCREEN: 2 inch	
		TYPE OF SAND PACK: #1 Sil	ica Quartz
			·
	C	ELEVATION/DEPTH BOTTOM OF	SCREEN:/200'
		ELEVATION/DEPTH BOTTOM OF BACKFILL MATERIAL BELOW SAN	
		Natural Form.	stion Material
		ELEVATION/DEPTH OF HOLE:	<u>/205</u>

WELL NO .: MW-305D



OVERBURDEN MONITORING WELL SHEET STICK-UP

DRILLER MUKIH PROJECT 1/2602230 LOCATION BENTANCE No. BENTANCE SITE | FLOVEST BORING BISS - IT-MW3050 DRILLING METHOD 8" & MUD LOTHING DATE BEGUN November 17, 2011 DATE COMPLETED Number 21, 2011
FIELD GEOLOGIST T Languages DEVELOPMENT GROUND ELEVATION DATUM METHOD ELEVATION/HEIGHT OF TOP OF SURFACE CASING:____ Z 97/29/99 ELEVATION/HEIGHT OF TOP OF RISER PIPE: TYPE OF SURFACE SEAL:_____ ACAD: FORM_MWSU I.D. OF SURFACE CASING: TYPE OF SURFACE CASING: RISER PIPE I.D.: 3"
TYPE OF RISER PIPE: 3CH. 40 PVC BOREHOLE DIAMETER: 8" Ø -TYPE OF BACKFILL: Creo High Johds BENTONIK Count (Portlens) good ELEVATION/DEPTH TOP OF SEAL: TYPE OF, SEAL: CEPS High Solids Benkinut DEPTH TOP OF SAND PACK: 263 2861 ELEVATION/DEPTH TOP OF SCREEN: TYPE OF SCREEN: JOH 40 PUC SLOT SIZE x LENGTH: 0.010 SLOT - 10 I.D. OF SCREEN: 2" Ø TYPE OF SAND PACK: 4/ SAND PACK (370-306) # 00 JANNON (263-270' 2961 ELEVATION/DEPTH BOTTOM OF SCREEN: ELEVATION/DEPTH BOTTOM OF SAND PACK: BACKFILL MATERIAL BELOW SAND: 300 | - ELEVATION/DEPTH OF HOLE: "

WELL NO .: MW-306\$



OVERBURDEN MONITORING WELL SHEET STICK-UP

	PROJECT NWIRP Beth page. LO PROJECT NO. 1/2Go 2230 BO DATE BEGUN 12-8-11 D. FIELD GEOLOGIST Vince Shic GROUND ELEVATION D.	ATE COMPLETED 12-8-11	DRILLER Jason Gueci DRILLING HSA METHOD HSA DEVELOPMENT METHOD
67/26/99 INL		ELEVATION/HEIGHT OF TOP OF	
		TYPE OF SURFACE SEAL:	
ACAD: FORM_MWSU.dwg		I.D. OF SURFACE CASING: TYPE OF SURFACE CASING:	
¥		TYPE OF RISER PIPE: Schedul	
		BOREHOLE DIAMETER: 8,	,
		Besterite / Portland	
		TYPE OF SEAL: Bertonte	Holeplug
	1935 1935 1935 1935 1935 1935 1935 1935	DEPTH TOP OF SAND PACK:	
		TYPE OF SCREEN: Schedule	. 40 PVC
		SLOT SIZE x LENGTH: <u>0.01</u> I.D. OF SCREEN: <u>2 inch</u>	
		at an	
		TYPE OF SAND PACK: #1 51	
		ELEVATION/DEPTH BOTTOM OF	
		BACKFILL MATERIAL BELOW SAY No total format	ND:
		ELEVATION/DEPTH OF HOLE:	

WELL NO.: <u>MW-306I</u>



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

ACAD:FORM_MWSU.dwg 07/20/99 INL	ROJECT <u>NWIRP Both page</u> LO ROJECT NO. <u>112602230</u> BO ATE BEGUN <u>12-6-11</u> DO IELD GEOLOGIST <u>Vince Shick</u>	ORING <u>MW-306 I</u> ATE COMPLETED	DRILLER JOSON GUECI DRILLING METHOD 1+SA DEVELOPMENT
62/26/88	ROUND ELEVATION DA	ATUM	METHOD
	ROUND ELEVATION D		SURFACE CASING: / RISER PIPE: / PICH THE 40 PVC THE 40
		TYPE OF SCREEN: Schedule SLOT SIZE × LENGTH: 0.01 I.D. OF SCREEN: 2 1200 TYPE OF SAND PACK: 150 ELEVATION/DEPTH BOTTOM OF BACKFILL MATERIAL BELOW SAND PACK: 150 Material Below SAND P	SAND PACK: /199'

WELL NO .: MW-3060



OVERBURDEN MONITORING WELL SHEET STICK-UP

	PROJECT NWTRP Bethoage LOC PROJECT NO. 112602230 BOR DATE BEGUN 11-28-11 DA FIELD GEOLOGIST VIAZE Shicker GROUND ELEVATION DA	RING <u>Mい-306り</u> TE COMPLETED	DRILLER Bill Murphy DRILLING METHOD Mud Rotary DEVELOPMENT METHOD
ACAD:FORM_MWSU.dwg 67/26/99 INL		ELEVATION/HEIGHT OF TOP OF ELEVATION/HEIGHT OF TOP OF TYPE OF SURFACE CASING: TYPE OF SURFACE CASING: TYPE OF RISER PIPE: 2 inch TYPE OF RISER PIPE: 5 cholu BOREHOLE DIAMETER: TYPE OF BACKFILL: Color High Capact (Rottent) Growth ELEVATION/DEPTH TOP OF SEA TYPE OF SEAL: Color High So Canad (Portland) Growth DEPTH TOP OF SAND PACK: ELEVATION/DEPTH TOP OF SCR TYPE OF SCREEN: Schedule SLOT SIZE x LENGTH: 0.01 I.D. OF SCREEN: 2 inch	Le 40 pvc Solids Bentonte- L: Ide Bentonte- -t 270' EEN: /284
		TYPE OF SAND PACK: 1 Silver of Sulting April	SCREEN: /294 sand pack: /303 s



OVERBURDEN MONITORING WELL SHEET STICK-UP

	PROJECT Benefit 5,16 Januarian LOC PROJECT NO. 1/2602236 BOF DATE BEGUN Montain 21 7011 DAT FIELD GEOLOGIST 1. heroson GROUND ELEVATION DAT	CATION Beneral show Your DRILLER 6000 PRING 8/31-11-1000 10000 DRILLING METHOD 10000 DEVELOPMENT METHOD	ect w Green Aviers
07/20/99 INL		ELEVATION/HEIGHT OF TOP OF SURFACE CASIN	IG:/
		TYPE OF SURFACE SEAL:	- -
ACAD: FORM_MWSU.dwg		TYPE OF SURFACE CASING:	
,		TYPE OF RISER PIPE: 3cH 46	<u>-</u>
		- BOREHOLE DIAMETER: 8.25" of TYPE OF BACKFILL: Cerco BENTONITE - Coment growt	_
		- ELEVATION/DEPTH TOP OF SEAL:	31.5'
		TYPE OF SEAL: BENIONITE Pelled Sign DEPTH TOP OF SAND PACK:	
		ELEVATION/DEPTH TOP OF SCREEN:	40.5 1
		SLOT SIZE X LENGTH: 0.010 5.01 - 10'	_
		1.D. OF SCREEN: 3"	
		TYPE OF SAND PACK: # 1 SILICIA SAND	<u></u>
		ELEVATION/DEPTH BOTTOM OF SCREEN:	50.5 /
		ELEVATION/DEPTH BOTTOM OF SAND PACK: BACKFILL MATERIAL BELOW SAND: 1/14	<u>505'/</u>
		ELEVATION/DEPTH OF HOLE:	50.51

WELL NO .: MW-307.T



OVERBURDEN MONITORING WELL SHEET STICK-UP

	1000 10011100, Riv.				***************************************
	PROJECT //2602230	LOCAT	ION BETHPAGE NEW YORK	DRILLER <u>GUERO</u>	
	PROJECT NO. BETH PAGE SIN	<u>* / Twis</u> f.BORIN	G8831-11-MW307I	DRILLING	(
	DATE BEGUN November 17 FIELD GEOLOGIST I for	20// DAIL	COMPLETED 1/0/ 18, 20//	METHOD Alollow	· ·
	GROUND ELEVATION	DATUN	1	DEVELOPMENT METHOD	
ĸ	A		ELEVATION/HEIGHT OF TOP OF	SURFACE CASING:	
			ELEVATION/HEIGHT OF TOP OF	DICED DIDE.	/
61/29/38			ELEVATION/HEIGHT OF TOP OF	RISER FIFE:	
61					
Ď.			TYPE OF SURFACE SEAL:		
ACAD: FORM_MWSU.dwg	4	المستعران			
Š			Th OF CUDEACE CACINO		
FOR			I.D. OF SURFACE CASING: TYPE OF SURFACE CASING:		
GAS.					
•			PISED DIDE ID: 2" Ø		
			RISER PIPE I.D.: 2" Ø TYPE OF RISER PIPE: JOA	40 PVC	
		-	borehole diameter: <u>8 /4 "</u>	115N	
			TYPE OF BACKFILL: Lerco the	h 30/109	
			SENTOHITE Commt (For Hend) browt	
			ELEVATION/DEPTH TOP OF SEA	1.	18/ /
4		***	•		767
			TYPE OF SEAL: BENTONITE	Poriet	
	in the second se		DEPTH TOP OF SAND PACK:		185'
	888		DEFIN TOP OF SAND FACK.		707
		*	ELEVATION/DEPTH TOP OF SCR	FEN:	190'1
			EFFAKITON DEL ILI TOL OL SON	LLC14+	7707
			TYPE OF SCREEN: Sch 40	PVC	
			SLOT SIZE x LENGTH: 0.010 5	cor - 16'	
			I.D. OF SCREEN: 2"	-	
			I.D. OF SCREEN:		
		*			
	888		TYPE OF SAND PACK: # 1 500	un Sandonek	
					and .
			ELEVATION/DEPTH BOTTOM OF	SCREEN:	2001
			ELEVATION/DEPTH BOTTOM OF		200'1
			BACKFILL MATERIAL BELOW SAI		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
			# PM TON		200'1
			ELEVATION/DEPTH OF HOLE:		

WELL NO.: MW-307D



OVERBURDEN MONITORING WELL SHEET STICK-UP

	PROJECT Benefield Sire Sinder. PROJECT NO. 112601230 DATE BEGUN Modern has 3 2011 FIELD GEOLOGIST J. Ferguson GROUND ELEVATION	BORING BPSI-TY-MW307D DRILLING	
97/29/99 INL	•	ELEVATION/HEIGHT OF TOP OF SURFACE CASING ELEVATION/HEIGHT OF TOP OF RISER PIPE:	*
		TYPE OF SURFACE SEAL:	
ACAD: FORM_MWSU.dwg		I.D. OF SURFACE CASING: TYPE OF SURFACE CASING:	
٠		RISER PIPE I.D.: 2" & TYPE OF RISER PIPE: SOIT UD PUC	- -
		TYPE OF BACKFILL: Loro the holids BASTONIE - Coment (Partlend) Growt	
•		ELEVATION/DEPTH TOP OF SEAL:	2'/
,	\$1888888888888888888888888888888888888	TYPE OF SEAL: Lerco High Solids BENTOWITE Lement (Portland) GROUT DEPTH TOP OF SAND PACK:	266
		TYPE OF SCREEN: 3ch 40 PUC	276'1
		SLOT SIZE x LENGTH: 0.0/0 5101 - 10	-
		I.D. OF SCREEN: 3" \$	-
		TYPE OF SAND PACK: #/ SINCA SANDERCK	_
		(271-286 5 SILCA) (2616-271' (20)	.
	M — 8	ELEVATION/DEPTH BOTTOM OF SCREEN:	286'1
		BACKFILL MATERIAL BELOW SAND: 1/ Shin Sind (286-433)	<u> 296.1</u>
		ELEVATION/DEPTH OF HOLE:	433'/

WELL NO.: BPSI-TT-MW3085



OVERBURDEN MONITORING WELL SHEET STICK-UP

DRILLER J. GUERCT PROJECT BETHPAGE S.TE I JAINET LOCATION BPS1-TT-MW3085 BORING 140-3084 PROJECT NO. 113603730

DATE BEGUN 11-11-30/1 DRILLING METHOD <u>4/4" HSA</u> DATE COMPLETED 11-14-2011

FIELD GEOLOGIST J. FERGUSON DEVELOPMENT DATUM GROUND ELEVATION METHOD ELEVATION/HEIGHT OF TOP OF SURFACE CASING: ____/ z 87/29/99 ELEVATION/HEIGHT OF TOP OF RISER PIPE: TYPE OF SURFACE SEAL: ACAD: FORM_MWSU.dwg I.D. OF SURFACE CASING: TYPE OF SURFACE CASING: __ RISER PIPE I.D.: 3"
TYPE OF RISER PIPE: 3CH. 46 PVC - BOREHOLE DIAMETER: 814" & 143A -TYPE OF BACKFILL: BENIONITE COMME GOST - ELEVATION/DEPTH TOP OF SEAL: TYPE OF SEAL: BENTONITE POLLET DEPTH TOP OF SAND PACK: - ELEVATION / DEPTH TOP OF SCREEN: TYPE OF SCREEN: SCH 40 PUC SLOT SIZE x LENGTH: 0.010 5001 - 10 I.D. OF SCREEN: 2" TYPE OF SAND PACK: #/ Sicion 641 ELEVATION / DEPTH BOTTOM OF SCREEN: 641 ELEVATION / DEPTH BOTTOM OF SAND PACK: BACKFILL MATERIAL BELOW SAND: 415 dun 641 ELEVATION / DEPTH OF HOLE:



OVERBURDEN MONITORING WELL SHEET STICK-UP

	PROJECT BETHPANE SITE IN PROJECT NO. 11260236 DATE BEGUN 11-14-2011 FIELD GEOLOGIST T. FUGG GROUND ELEVATION	DATE COMPLETED 11-15-2011 METHOD 4	14" \$ H3H
07/20/99 INL		ELEVATION/HEIGHT OF TOP OF SURFACE CA ELEVATION/HEIGHT OF TOP OF RISER PIPE:	
		TYPE OF SURFACE SEAL:	
ACAD: FORM_MWSU.dwg		I.D. OF SURFACE CASING: TYPE OF SURFACE CASING:	
		RISER PIPE I.D.: 3" TYPE OF RISER PIPE: 4 14 0 15 14 15 15 14 15 15 15 15 15 15 15 15 15 15 15 15 15	<u> </u>
	N.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X	TYPE OF BACKFILL: BENTONIK - CENTER - Sport (LETCO HIGH JULIOS BENT	,
		ELEVATION/DEPTH TOP OF SEAL: TYPE OF SEAL: BENTONITE PELLET	146 /
		DEPTH TOP OF SAND PACK:	250
		ELEVATION/DEPTH TOP OF SCREEN:	<u> 1561 </u>
		TYPE OF SCREEN: 2" & Sc. 140, .010 SLOT SIZE x LENGTH: 0.010 5.01 -	,
		I.D. OF SCREEN: 2"	
		TYPE OF SAND PACK: # / SILICH	dagapinani astrina
		ELEVATION/DEPTH BOTTOM OF SCREEN:	1641
		4	
		ELEVATION/DEPTH OF HOLE:	

WELL NO .: Mul-3081)



OVERBURDEN MONITORING WELL SHEET STICK-UP

	PROJECT BANKAR SIME 1 TO PROJECT NO. 11360 3230 DATE BEGUN 15.1 AU. 2011 FIELD GEOLOGIST J. KASU GROUND ELEVATION	DRILLER B. MULLITY BORING BBJ: IT - MUSORD DATE COMPLETED OFFICE 31, 2011 DATUM DEVELOPMENT METHOD	
67/29/99 INL		ELEVATION/HEIGHT OF TOP OF SURFACE CASING: / ELEVATION/HEIGHT OF TOP OF RISER PIPE: /	
ACAD: FORM_NWSU.dwg		TYPE OF SURFACE SEAL:	
ACAD: FOR		I.D. OF SURFACE CASING: TYPE OF SURFACE CASING:	
		TYPE OF RISER PIPE: 304 40 PVC	:
		TYPE OF BACKFILL: (GOD High Solids Bensonie Lement (Portland) Grout.	
		ELEVATION/DEPTH TOP OF SEAL: 24//	
		DEPTH TOP OF SAND PACK: 243	
		TYPE OF SCREEN: JOH. 40 PVC	
		SLOT SIZE x LENGTH: 0.010 5007 - 10' I.D. OF SCREEN: 2" Ø	
		TYPE OF CAMP DAGE	
		TYPE OF SAND PACK: Susan Sandande (#1 Susan 244 262) ELEVATION/DEPTH BOTTOM OF SCREEN: 260'1	
		ELEVATION/DEPTH BOTTOM OF SCREEN: 340'; BACKFILL MATERIAL BELOW SAND: 15 and 240'349') Land (246'-283') Bentano (243'366')	
		ELEVATION/DEPTH OF HOLE: 283'/	

WELL NO .: BPSI-MW309\$



OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

	PROJECT NO. 1 PROJECT NO. 1 DATE BEGUN FIELD GEOLOGI GROUND ELEVA	IRP Betlyage Site 112602230 11-9-11 IST <u>J. Birkett</u> ATION	LOCATION MU BORING BPSI- DATE COMPLET	1309\$ MW309\$ ED	DRILLER S. G. DRILLING METHOD HS/ DEVELOPMENT METHOD	<u> </u>
IN.			ELEVATION	TOP OF RISER:		
62/29/88	·		TYPE OF SI	URFACE SEAL:		
ACAD: FORM_MWFM.dwg	FLUSH MOUN SURFACE CA	NT.	TYPE OF PI	ROTECTIVE CASING:_		
SE SE	WITH LOCK	ISING	I.D. OF PRO	OTECTIVE CASING:		
CAD: F			DIAMETER (OF HOLE: 8		
Ā			1	ISER PIPE: Sched		
				ر T'D': گے		1
			TYPE OF B	ackfill/seal: <u>Ben</u>	tonite grout w/ so	sme cemeat
	,					
			FLEVATION	/DEPTH TOP OF SEA		/ 44.5
	, ,				_	<u> </u>
			TYPE OF S	EAL: <u>Hydrated</u> be Coated tablets	(1/4" Peller>	
				* *		
	••		ELEVATION	/DEPTH TOP OF SAN	ND:	149
					-	
					~"	m-1
				/DEPTH TOP OF SCF CREEN: <u>Schedul</u> e		/53'
				× LENGTH: <u>0,0\0</u>		
			TYPE OF S	AND PACK: #1 S Superior Quartz	Filtration Media	
			,	•		
			DIAMETER-	OF HOLE IN BEDROC	*************************************	
			ELEVATION	/ DEPTH BOTTOM (OF SCREEN:	<u>/ 63`</u>
			1	/ DEPTH BOTTOM (-	163
				/DEPTH BOTTOM OF	1	1631
			BACKFILL I	MATERIAL BELOW SA	ND: 63	

WELL NO .: BPSI-MW309 I



OVERBURDEN MONITORING WELL SHEET STICK-UP

	PROJECT NWIRP Bethpage PROJECT NO. W2602230 DATE BEGUN 11.8-11 FIELD GEOLOGIST J. Birkett GROUND ELEVATION	LOCATION MW 309 BORING BYSI-MW 309 TO DATE COMPLETED 11-8-11 DATUM	DRILLER Jason Guec. DRILLING METHOD HSA DEVELOPMENT METHOD
dwg 67/26/99 INL		ELEVATION/HEIGHT OF TOP OF ELEVATION/HEIGHT OF TOP OF TYPE OF SURFACE SEAL:	RISER PIPE:/
ACAD: FORM_MWSU.dwg		I.D. OF SURFACE CASING: TYPE OF SURFACE CASING: RISER PIPE I.D.: TYPE OF RISER PIPE: Schedu	
		BOREHOLE DIAMETER: 2" bentonite TYPE OF BACKFILL: Cement 6	grout w/little cement to sortace pentonite grout to 50'bgs
	2	TYPE OF SEAL: Hydrated E Cetco content tablets (1/4") DEPTH TOP OF SAND PACK:	Bentonile pellets
		SLOT SIZE x LENGTH: 10 SI	
		TYPE OF SAND PACK: # \ SIL FILDER Superior Quartz ELEVATION/DEPTH BOTTOM OF	Filtration Media
		ELEVATION/DEPTH BOTTOM OF SAN	
		ELEVATION/DEPTH OF HOLE:	

WELL NO .: BPSI-TT-MW309D



OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT Bethonge Site 1 Truestination LOCATION Bethonge New York

PROJECT NO. 1/2602230 BORING BPSI-TT-MW309D

DATE BEGUN DATE COMPLETED Nov. 10, 2012

FIELD GEOLOGIST J. Fergusen DEVELOPMENT

FIELD GEOLOGIST J. Ferqueen DEVELOPMENT METHOD <u>Air Lift</u> and Grandfes GROUND ELEVATION **DATUM** ELEVATION/HEIGHT OF TOP OF SURFACE CASING: / 3' z 61/20/99 ELEVATION/HEIGHT OF TOP OF RISER PIPE: ______/ 2,75` TYPE OF SURFACE SEAL: Concrete ACAD: FORM_MWSU.dwg I.D. OF SURFACE CASING: 4" TYPE OF SURFACE CASING: Protective Steel Casing Square RISER PIPE I.D.: 2" TYPE OF RISER PIPE: Schedule 40 PVC BOREHOLE DIAMETER: 8,25" TYPE OF BACKFILL: <u>Cetco bentonite/portland</u> cement 244 ELEVATION/DEPTH TOP OF SEAL: TYPE OF SEAL: Bentonite Pellets 248 DEPTH TOP OF SAND PACK: - ELEVATION/DEPTH TOP OF SCREEN: /252' TYPE OF SCREEN: Schedule 40 PVC SLOT SIZE x LENGTH: O. GO Slot by 10' I.D. OF SCREEN: 2" ID TYPE OF SAND PACK: No. 1 Silica Sound 262 ELEVATION/DEPTH BOTTOM OF SCREEN: 262 ELEVATION/DEPTH BOTTOM OF SAND PACK: BACKFILL MATERIAL BELOW SAND: Notural Back Fill 275 ELEVATION/DEPTH OF HOLE:





Page _1_ of __1_

Well: BP-MW-305S	_Depth to Bottom (ft.): _50.3'	Responsible Personnel: <u>J. Ferguson</u>
Site: Bethpage Site 1	Static Water Level Before (ft.): 43.14'	Drilling Co.: Delta Drilling
Date Installed:11/12/2011	Static Water Level After (ft.): 43.13'	Project Name: Bethpage Site 1
Date Developed:12/08/2011	Screen Length (ft.): 10'	Project Number: 112G02230
Dev. Method: <u>Airlift/submersible</u>	Specific Capacity: Not determined	
Pump Type: <u>centrifugal</u>	Casing ID (in.): 2" ID	

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	рН	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
10:45	2	0	43.14'	15.34	5.86	0.119	>1000	Airlift, gray, turbid.
11:00	0	500		15.56	5.38	0.097	363	Airlift, gray, turbid.
11:15	0	1000		15.54	5.53	0.097	72.5	Airlift, gray, turbid.
11:30	0	1500		15.16	5.30	0.095	35	clear
11:45	0	2000	│	15.12	5,28	0.094	37	clear
12:00	0	no es m	43.15'	15.79	5.50	0.074	162	
					VI			
				· · · · · · · · · · · · · · · · · · ·				



Page <u>1</u> of <u>1</u>

Well: <u>BP-MW-305l</u>	Depth to Bottom (ft.): 200'	Responsible Personnel: <u>J. Ferguson</u>	
Site: Bethpage Site 1	Static Water Level Before (ft.): 47.85'	Drilling Co.: Delta Drilling	
Date Installed: _11/28/2011	Static Water Level After (ft.): 47.87'	Project Name: Bethpage Site 1	
Date Developed:12/07/2011	Screen Length (ft.): 10'	Project Number: 112G02230	
Dev. Method: Airlift/submersible	Specific Capacity: Not determined		÷
Pump Type: centrifugal	Casing ID (in.): 2" ID		

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pН	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
10:45	0.5'	0	47.85'	16.4	6.08	0.211	200	Airlift -Lt. brown-brown.
11:10				16.64	5.8	0.212	60.2	Lt. brown.
11:30				16.64	5.81	0.210	60.1	Cloudy.
11:35				16.6	5,89	0.216	210	Submersible - Lt. brown.
12:20	V	↓		16.68	5.71	0.213	51	Clear
12:25	0	1100	47.87'	16.77	5.56	0.214	40.8	Clear



Page <u>1</u> of <u>1</u>

Responsible Personnel: J. Ferguson Well: BP-MW-305D Depth to Bottom (ft.): 291.6' Site: Bethpage Site 1 Static Water Level Before (ft.): 44.45' Drilling Co.: Delta Drilling Static Water Level After (ft.): 44.47' Project Name: Bethpage Site 1 Date Installed: __11/11/2011 Project Number: 112G02230 Date Developed: 12/07/2011 Screen Length (ft.): 10' .Dev. Method: Airlift/submersible Specific Capacity; Not determined Casing ID (in.): 2" ID Pump Type: centrifugal

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	рH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
8:50	3.8′	0	44.45	16.42	5.98	0.397	>1000	Airlift, brown, turbid.
9:05	0	1000		16.35	6.71	0.218	403	Airlift, gray, turbid.
9:40	0	1500		16.82	6.59	0.204	269	Airlift, gray, turbid.
9:50	0	2000		16.78	6.42	0.198	300	Airlift, gray, turbid.
13:35	0	2058		17.27	5.51	0.190	138	Submersible pump
13:50	0	2116		17.24	5.30	0.198	50.9	Light gray
14:05	0	2174		17.26	5.19	0.195	39.4	
14:20	0	2232		17.27	5.11	0.193	36.1	V
14:35	0	2290	V	17.28	4.95	0.192	36.7	Clear
14:50	0	2350	44.47	17.28	4.70	0.191	33.6	Clear



Page _1_ of __1__

Responsible Personnel: J. Ferguson Well: BP-MW-306S Depth to Bottom (ft.): 50.3' Site: Bethpage Site 1 Static Water Level Before (ft.): 43.14' Drilling Co.: Delta Drilling Date Installed: 12/07-08/2011 Static Water Level After (ft.): 43.15' Project Name: Bethpage Site 1 Date Developed: 12/08/2011 Project Number: 112G02230 Screen Length (ft.): 10' Dev. Method: Airlift/submersible Specific Capacity: Not determined Pump Type: centrifugal Casing ID (in.): 2" ID

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	рH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
10:45	0.5'	0	47.85'	16.4	6.08	0.211	200	Airlift -Lt. brown-brown.
11:10				16.64	5.8	0.212	60.2	Lt. brown.
11:30				16.64	5.81	0.210	60.1	Cloudy.
11:35				16.6	5.89	0.216	210	Submersible - Lt. brown.
12:20	\downarrow	V		16.68	5.71	0.213	51	Clear
12:25	0	1100	47.87'	16.77	5.56	0.214	40.8	Clear



Page _1_ of __1_

Well: <u>BP-MW-3061</u>	Depth to Bottom (ft.): 199'	Responsible Personnel: <u>J. Ferguson</u>	
Site: Bethpage Site 1	Static Water Level Before (ft.): 47.5'	Drilling Co.: Delta Drilling	
Date Installed: _12/05-06/2011	Static Water Level After (ft.): 47.57'	Project Name: Bethpage Site 1	
Date Developed: 12/09/2011	Screen Length (ft.): 10'	Project Number: 112G02230	
Dev. Method: Airlift/Submersible	Specific Capacity: <u>Not determined</u> .		,
Pump Type: centrifugal	Casing ID (in.): 2" ID		

Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pН	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
0.5'	0	47.5'	17.13	6.07	0.181	549	Airlift -Lt. brown-brown.
			17.33	5.67	0.172	38.9	Clear
			16.87	5.16	0.167	31.8	
			16.89	4.97	0.165	30.4	
			16.89	4.97	0.164	30.2	
			16.92	4.97	0.164	29.5	
V	V		16.92	4.96	0.163	28.6	
0	1150	47.57'	16.91	4.98	0.163	28,4	<u> </u>
	Sediment Thickness (Ft.) 0.5'	Sediment Water Thickness (Ft.) (Gal.) 0.5' 0	Sediment Thickness (Ft.) Volume (Gal.) Readings (Ft. below grnd) 0.5' 0 47.5'	Sediment Thickness (Ft.) Water Volume (Gal.) Water Readings (Ft. below grnd) Temperature (Degrees C) 0.5' 0 47.5' 17.13 17.33 16.87 16.89 16.89 16.92 16.92	Sediment Thickness (Ft.) Water Volume (Gal.) Water Level Readings (Ft. below grnd) Temperature (Degrees C) pH 0.5' 0 47.5' 17.13 6.07 16.87 5.16 16.89 4.97 16.92 4.96	Sediment Thickness (Ft.) Water Volume (Gal.) Water Level Readings (Ft. below grnd) Temperature (Degrees C) pH Specific Conductance (Units mS/cm) 0.5' 0 47.5' 17.13 6.07 0.181 17.33 5.67 0.172 16.87 5.16 0.167 16.89 4.97 0.165 16.92 4.97 0.164 16.92 4.96 0.163	Sediment Thickness (Ft.) Water Volume (Gal.) Water Level Readings (Ft. below grnd) Temperature (Degrees C) pH Specific Conductance (Units mS/cm) Turbidity (NTU) 0.5' 0 47.5' 17.13 6.07 0.181 549 17.33 5.67 0.172 38.9 38.9 16.87 5.16 0.167 31.8 16.89 4.97 0.165 30.4 16.92 4.97 0.164 29.5 16.92 4.96 0.163 28.6



Page _1_ of __1__

Depth to Bottom (ft.): 294' Responsible Personnel: J. Ferguson Well: BP-MW-306D Site: Bethpage Site 1 Static Water Level Before (ft.): 43.98' Drilling Co.: Delta Drilling Date Installed: __11/28-30/2011 Static Water Level After (ft.): 43.96' Project Name: Bethpage Site 1 Date Developed: 12/11/2011 Screen Length (ft.): 10' Project Number: 112G02230 Dev. Method: Airlift/submersible Specific Capacity: Not determined Pump Type: centrifugal Casing ID (in.): 2" ID

Time	Estimated · Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pН	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
13:30	+/-1.5'	Initial	43.50'	13.94	5.03	0.211	>1000	Initially, turbid, gray to white
13:45		150		14.62	5.90	0.177	185	
13:50		300		14.83	5.83	0.166	115	
14:15		450		13.16	5.87	0.169	423	Submersible
14:30		600		14.52	6.00	0.165	69.7	
14:45		750		13.95	5.89	0.165	45.2	
15:00	\downarrow	1000	₩	13.94	5.88	0.165	43.1	
15:15	0	1100	43.46'	13.96	5.89	0.164	43.2	<u> </u>
								100000000000000000000000000000000000000

Page _1_ of __1_

Well:BP-TT-MW-307SDepth to Bottom (ft.):50.5'Responsible Personnel:J. FergusonSite:Bethpage Site 1Static Water Level Before (ft.):Drilling Co.:Delta DrillingDate Installed:11/11/2011Static Water Level After (ft.):47.75'Project Name:Bethpage Site 1Date Developed:12/06/2011Screen Length (ft.):10'Project Number:112G02230

Dev. Method: Submersible Specific Capacity: Not determined

Pump Type: _Fultz-centrifugal ____ Casing ID (in.): _2" ID ____

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pН	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
9:23	1.5	0	47.98'	16.44	5.81	0.113	>1000	Tan-brown, turbid - Q = +/- 7.5 gpm
9:53		150		16.34	5.78	0.145	113	Lt. brown.
10:23		375		16.43	5.98	0.148	111	Lt. brown.
10:53		600		16.36	5.83	0.148	214.0	Clear
11:23		875		16.42	5.53	0.148	324.0	Clear
11:53		1100		16.32	5.79	0.148	57.3	Clear
12:23		1325		16.41	5.75	0.149	66.8	Clear
12:53		1550		16.5	5.91	0.150	460.0	Clear
13:13		1550		16.98	5.88	0.148	>1000	Tan-brown, turbid - Q = +/- 4.5 gpm
13:53	V	1730	V	15.15	5.95	0.151	345.0	Turbid
13:23	0.0	1865	47.95'	15.16	5.90	0.150	76.0	Clear
j								

Tetra Tech NUS, Inc. MONITORING WELL DEVELOPMENT RECORD

Page <u>/</u> of <u>/</u>

Well: 8851-T-T-MW3077	Deptil to Bottom (147)	Responsible Personnel: Krish	trancis co
Site: SING)	Static Water Level Before (ft.): 44.7	Drilling Co.: 1)FLTA	7 11 1/2
Date Installed:	Static Water Level After (ft.);95.21	Project Name: Slle 1 - PCB	Laverganen
Date Developed: 12 211	Screen Length (ft.):	Project Number: 112002230	/ 2
Dev. Method: Punt burge	_Specific Capacity:	1025 - Deve	clopment begins
Pump Type: Grundfox	_ Casing ID (in.): <u> </u>	_	,

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pН	Specific Conductance (Units <u>M5/C1</u>)	Turbidity (NTU)	po_	Remarks (odor, color, e	
1325		600	53,49	1586	7,03	0.206	22,6	10.26	214	clear
1330		_	53.49	15.70	6.35	0.250	1,0	994	212	clear
13 35	1		63,49	15.72	6.26	0.241	1.40	10.09	<u> 208 </u>	donc
1340			53,49	1554	6.17	0.246	0.61	10.05	211	Chear
1345			53,49	15.62	6.14	0,241	1.20	9,86	2)0	لبصع
1350			63,4g	15.67	6.14	0.239	1,53	9:77	2.10	Near
1355			53,49	15,41	6.12	0.241	4,64	9.82	214	clear
1400			53.49	15.37	(0.11	0,240	1.21	9,79	214	Clear
1405		6.40	53,49	15.63	6,10	0.240	0 .00	9,73	215	das
					<u> </u>					
	<u></u>			<u> </u>			1	<u> </u>		
		ļ								
					<u> </u>					
					-			1		
									-w	<u></u>
					1				<u> </u>	
``										



Page _1_ of __1__

Well: <u>BP-MW-307D</u>	Depth to Bottom (ft.): 286'	Responsible Personnel: <u>J. Ferguson</u>
Site: Bethpage Site 1	Static Water Level Before (ft.): 43.98'	Drilling Co.: Delta Drilling
Date Installed:11/11/2011	Static Water Level After (ft.): 43.96	Project Name: Bethpage Site 1
Date Developed:12/05/2011	Screen Length (ft.): 10'	Project Number: 112G02230
Dev. Method: Airlift/submersible	Specific Capacity: Not determined	
Pump Type: <u>centrifugal</u>	Casing ID (in.):2" ID	

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	рΗ	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
10:00	4'	0	43.98'	15.34	5.04	0.231	23.9	Airlift, gray, turbid.
10:30		500		15.56	5.49	0.190	83.2	Turbid.
10:45		1000		15.54	5.53	0.182	83.7	Clear
11:45		1500		15.16	5.56	0.194	71.7	Turbid.
12:00		2000		15.12	5.95	0.182	70.8	Submersible, clear
13:40		1500		15.79	5.58	0.180	69.7	Submersible - clear
14:00		1567		15.91	4.81	0.179	3.1	
14:30		1667		15.93	4.61	0.178	1.6	
15:00	V	1767	<u> </u>	15.94	4.66	0.177	1.3	
15:25	0	1867	43.96'	15.95	4.69	0.177	1.3	√

TŁ	Tetra Tech NUS, Inc.
----	----------------------

MONITORING WELL DEVELOPMENT RECORD Page ______ of ______

Well: BPS1-TT-MW3085	Depth to Bottom (ft.):67	Responsible Personnel: Krish Francisce
Site: 5) te l	Static Water Level Before (ft.): 55.4	Drilling Co.: DELTA Project Name: Site PCB investigation
Date Installed:	Static Water Level After (ft.): 55.78	Project Name: site / PCB investigation
	Screen Length (ft.):	Project Number: 112602230
Date Developed: 12	_ 00,00. 20.19.1 ()	0735 - Development begins
Dev. Method: Jurge / fump	_ Specific Capacity:	0735 - DEVELOPITE 11 5 7,15
Pump Type: Grandles	_ Casing ID (in.): 2	·

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	рН	Specific Conductance (Units <u>m5/cm</u>)	Turbidity (NTU)	Remarks (odor, color, e <i>Po 6RP</i>	etc.)
0845		3 <i>2</i> 0	35.46	15,45	5,72	0,90	5.06	10.58 267	Chear
0850			35,46	15.15	2,22	0,964	2.13	10,52 234	Clear
0855			55.46	15,14	4,51	0,745	2,47	10.39 716	Clear
0900			55.46	15.15	6.54	0.715	3.53	10,26 210	Chear
0905			55.46	14.98	6,55		2.64	10.55 212	cheac
0910			55.46	15,28	658	0.675	0.48	10,31 204	chear
0915			55 46	15.17	6.56	0.672	0,33		Clear
0920			55.46	15.16	6.58	0.474	0.28	10.33 204	dear
0925		100	55,46	15,16	6.58	0.673	0.23	10.37 204	clear
					ļ				
							<u> </u>		
· · · · · · · · · · · · · · · · · · ·							<u> </u>		····
					<u> </u>				
					ļ —		-		
					1	<u> </u>			****
	}		1		<u> </u>		1		

T	Tetra Tech NUS, Inc.
---	----------------------

Page <u>l</u> of <u>l</u>

Well: BPS1-TT-MW308I	Depth to Bottom (ft.): 170 Responsible Per	sonnel: Kash Francis co
Site:	_Static Water Level Before (ft.): <u>67</u> Drilling Co.:	DEITA
Date Installed:	Static Water Level After (ft.): <u>57,14</u> Project Name: _	5, Ve 1 - POB Investigation
Date Developed: # 12-/1	Screen Length (ft.):/O Project Number:	112602230
Dev. Method: Purge 1 suge	Specific Capacity:	2000
Pump Type: <u>Grand Co3</u>	Casing ID (in.):	1200 - Begin development

Time	Estimated	Cumulative	Water Level	Temperature	рΗ	Specific	Turbidity	
	Sediment	Water	Readings	(Degrees C)		Conductance	(NTU)	Remarks
	Thickness	Volume	(Ft. below TOC)			(Units <u>w/sc w</u>)		(odor, color, etc.)
	(Ft.)	(Gal.)	:					06 BRP
1420		<u>500</u>	56.70		5,47	,240	154	8.05 26) clar
1425			56.70	13,80	5,62	,241	5.39	4.57 237 clear
1430		٠٠ مصميم	54,70	13.77	5.61	,241	2,74	7.0 % 24) Clear
1435	,	Autority	54.70	13.99	5.6	,241	0,86	7,66 240 chear
1490	· · · · · · · · · · · · · · · · · · ·	and the second s	56,70	13.93	5,60	、シュケ	0.00	7.71 236 chear
1445			56.70	13.78	5,58	244	0.00	7,73 234 dear-
1450			5600	13.71	5,58	,244	0.00	7.68 234 clear
1455			56.70	13.72	5.60	,240	0,61	7, 45 232 clear
1500		560	54.70	13.75	5,60	,241	0.89	7,62 232 clear
			N.,					1 AAA
								- A
							`	
7,5								٠
	The Marie Land							



Tetra Tech NUS, Inc. MONITORING WELL DEVELOPMENT RECORD

Page ____ of _____

Well: 8851-77-1003080	Depth to Bottom (ft.): 200 '	Responsible Personnel:	sh Francisco
Site: Side!	_ Static Water Level Before (ft.): _ らいしん	Drilling Co.: NELTA	
Date Installed:	Static Water Level After (ft.): 54.81	Project Name: 3 4 1- PCC) invastigation
Date Developed: וו בווים Date Developed: חול בווים ביים ווים ביים ווים ביים ביים ביי	Screen Length (ft.):	Project Number: 112 Gazz	
Dev. Method: Ar he pour	Specific Capacity:		
Pump Type:Grund Cas	Casing ID (in.):		begin development

Time	Estimated	Cumulative	Water Level	Temperature	рН	Specific	Turbidity		
	Sediment	Water	Readings	(Degrees C)	·	Conductance	(NTU)	Remarks	
	Thickness	Volume	(Ft. below TOC)			(Units <u>مجارد ہ</u>)		(odor, color,	
	(Ft.)	(Gal.)						DO ORP	,
1035		1,400 RE	56,71	14.58	506	, 240	1,07	7.76 248	clear
1100		_	510.71	14.53	5.41	,172	0,50	7,92 239	clear
1105			5671	14.15	5.46	164	0, 15	8.51 247	Cleve
1110			56.71	14.54	5,61	155	0.59	8,11 239	deer
115			56.71	13,89	5.48	.163	12,0	9.61 241	Cleer
1120			510.71	13,83	5.49	,149	149	8 73 242	dear
1125			56.71	14.45	5,49	149	6.48	9.01 238	clear
j 136			56.71	14.32	5,50	.149	2.14	285 234	clear
1135		1,450	56.71	14.21	5 50	.149	0.50	8.72 234	clear
				-					
			· · · · · · · · · · · · · · · · · · ·						
						··········			



Well: BB1-TT-MW3095	_ Depth to Bottom (ft.):	Responsible Personnel: Kash Francisca
Site: 5 Le	_ Static Water Level Before (ft.): <u>55</u>	Drilling Co.: Delta
Date Installed:	_ Static Water Level After (ft.): _ <i>55 (4</i> 8_	Project Name: 1- ACB Investigation
Date Developed: 11/3011	Screen Length (ft.):	Project Number: 1/2-60 12-30
Dev. Method: purgel surge	_ Specific Capacity:	0730-Development begins
Pump Type: Grand Cos	_ Casing ID (in.):2	- 0750 - Neverop 12.1 veg.

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pН	Specific Conductance (Units Man)	Turbidity (NTU)	Remarks (odor, color, etc.)		
0100	2	360	60-21	13.15	5,37	0,90	17.6	902 276 orange		
0905			le0,24	13.41	588	0,475	17.0	8.86 240 grange		
0910			(0.2)	13.46	4.00	0,403	16.9	8.63 251 orange		
<u>0915</u>			1.0.21	13.60	6.01	0,362		8.79 244 orange		
0920			60.21	13.60	6.02	0.360		834 241 srange		
0 925			60,21	13.66	(cD)	0.361	_	8.36 241 orange		
0930			40.21	13.64	4.00	0,341		8.34 241 prange		
0935			60.21	13.61	5,98	0.346		8.36 241 orange		
0940		400	60.21	13-66	5.98	6.346	13.9	8.38 24/ orange		
		-								
						·				



Tetra Tech NUS, Inc. MONITORING WELL DEVELOPMENT RECORD

Page <u>1</u> of <u>1</u>

Site:	Depth to Bottom (ft.): Responsible Personnel: Francisce Static Water Level Before (ft.): Drilling Co.: DELTA Static Water Level After (ft.): Project Name:
Date Developed: 1))30	Static Water Level After (ft.): Project Name: Site 1 - ACB investigation Screen Length (ft.): 10' Project Number: 112002230
Dev. Method: Sweet furge	Specific Capacity:

Time	Estimated	Cumulative	Water Level	Temperature	рН	Specific	Turbidity			
	Sediment	Water	Readings	(Degrees C)		Conductance	(NTU)	Remarks		(e
	Thickness	Volume	(Ft. below TOC)	·	i	(Units <u>~5/ ന</u> േ)	` ' '	(odor, color, etc.)		
1.0	(Ft.)	(Gal.)						00	OR	, 0.0.,
1330		550	376	14.51	5,14	0,342	1.07	9.76	249	Clear
13 35			57.8	14.35	5,20	0,252	2,60	943	263	chear
1340			57.8	14.32	5.20	0.251	1.73	9,67	259	clear
1345			67.8	14,29	5.20		0.18	963	258	
13 <i>5</i> 0			57. g	14.11	5.18	0.247	1,32	9.45	263	cheer
1400		٠	57.8		5 19	6,248	1.52	9,63	•	
1.405			57,8	14,08	5.18	0,245	0.73	9.64		Cleer
1410			57.8	14,12	5.17					clear
1415		620	57.8	14.10	5,17			9.61	<u> 255 </u>	Clear
		······································		<u>, , "o</u>	2//	10. 29 ()	0,0	962	<u> 255</u>	Chear
	****								****	
			····							
					-					
				·:						
	A Brown									
		WYCenes :								

Tt.	Tetra Tech NUS, Inc.
-----	----------------------

MONITORING WELL DEVELOPMENT RECORD

Page <u>1</u> of <u>1</u>

	Site:	1-TT-MW Le 1 led: loped: [1]26 od: Ar 1, Ut e:	309 D - 11/29 - 1/wrp Les	Depth to Bottom (Static Water Level Static Water Level Screen Length (ft.) Specific Capacity Casing ID (in.):	55' 35'	Responsible Personnel: John Stephen 3/Kosh Francisco Drilling Co.: Nelta Project Name: PCB Investigation Project Number: 1120 2230 11/28/11 - Development begins at 1310 to 11/29/11 - Development webgins at 1055					
	Time	Estimated	Cumulative	Water Level	Temperature	рН	Specific	Turblatty			
		Sediment	Water	Readings	(Degrees C)		Conductance	(NTU)		emarks	
		Thickness (Ft.)	Volume (Gal.)	(Ft. below TOC)			(Units <u>مع/کہہ</u>)		DO OLP	color, etc.)	
	1360,	(1 1.)	Eco	60.34	16.65	5,18	0.416	0,24	765 232	-0100-	
1400	1355		830	40.39	16.65	5.42	0,276		6,24 21)		
50	14 10		860	60.34	16.54	5.39	0,253	'	7.41 215		7
	1415		870	60.34	14.47	5 39	0,231	0.00	6.55 219		7
	1920		880	100.34		5.37	0.130	0.00	671 217		1
	1425		890	60.34	16,47	5.34	0.231		6.62 217		
	1430	. The	900	60.34	16.48	531	0.229	0.00	10.68 219		
	1435		910	60.34	16.45	5.31	0.223	0.00	6.65 220	0	
	1940		920	60.34	16.44	5.31	0.2-25	0.00	6.71 22		_
	•	,									_
			<u></u>								_
											-
						 					-
		<u> </u>									-





Page<u> /</u> of <u>/</u>

Project Site Name: Project No.:	NWIRP Beth 112G02230	page Site	1		Sample ID	BPS1-FWM\	-01192012 Not		
[] Domestic Well Data [X] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	(] Monitoring Well Data Other Well Type: QA Sample Type:				Sampled By: C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration				
SAMPLING DATA:									
Date: 1-19-12	Color	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP	
Time: 0930	(Visual)	(S.U.)	(mS/cm)	(⁰ C)	(NTU)	(mg/l)	(%)	(mV)	
Method: Low Flow - Grundfos	clear	7.08	0.461	13.93	8.9	6.71		248	
PURGE DATA:									
Date: 1-19-12	Volume	рH	s.c.	Temp.	Turbidity	DO	Salinity	ORP	
Method: Low Flow - Grundfos									
Monitor Reading (ppm): 0.0									
Well Casing Diameter & Material									
Type: ス" Schedule 40 PVC		ŀ	Sociows	low Durgo Ch	eet for Details				
Total Well Depth (TD):		<u> </u>	Jee Low (low ruige on	eer for Details	***************************************	1		
Static Water Level (WL): 52.36									
***************************************	***						<u> </u>		
One Casing Volume(gal/L):									
Start Purge (hrs): 6830									
End Purge (hrs): 09.30							<u> </u>		
Total Purge Time (min): 60									
Total Vol. Purged (gal)上): 6.5									
SAMPLE COLLECTION INFORMAT	TION:								
Analysis	w	Preser	vative	***************************************	Container Re	Collected			
TCL VOCs					mL clear glass	3			
PCBs				-	L ambler glass		ス		
Hexavalent Chromium		LINIOO			50-mL plastic b				
Total Metals (Total Cr and Filtered Metals (Total Cr and		HNO3			00-mL plastic b 00-mL plastic b			i	
TOC	л (с)	H2SO4		***************************************	nL amber glas				
		TIZOUT		0 40-1	ne amber glas	s viais			
		,		*****					
OBSERVATIONS / NOTES:						White Stor			
Pump set within screened intervals ~? Hexavalent Chromica			/+ ->	0.014	g/L				
Circle if Applicable:		g Lagranda an Bes	eyelê sirkili		Signature(s)):			
MS/MSD Duplicate ID No.:									



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-FW-MWOI
PROJECT NUMBER:	112G02230	DATE:	1-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0820	52.30									
0830	_52,32	400	6.64	0.383	205	8.46	12.68	217		cloudy (Brown)
08.3.5	52.32	400	チュー	0.430	254	7.14	13.92	2/3	-	11 11
0840	52:32	400	7.35	0.420	198	6.77	14.00	222		11 11
0845	<i>52.</i> 32	400	7.89	0.429	147	6.58	14.36	256		Tinted (Tan)
0850	<i>52.</i> 32	400	6,88	0.434	90.7	6.70	14.48	288		11 4
0855	52.32	400	6.40	0.442	71.4	6.71	14.40	259	-	is 11
6900	52.32	400	6.49	6.444	57.6	6.75	14,29	265	<	11 11
0905	52.32	400	6,87	0.449	48,3	6.80	14.17	272		11 1
6910	52.32	460	5.96	0.451	39,7	6.67	14.08	ステの	v _{ers}	12 11
0915	52.3L	400	7.00	0.454	30.0	6.72	14.01	265		Slight Tint (Ten)
0920	52.32	400	7.05	0.459	19.4	6.75	13.97	256		clear
0925	<i>52</i> .32	400	7.07	0.460	11.0	6.73	13.95	252	~	dear
0930	52,32	400	7.08	0.461	8.9	6.71	13.93	z48	-	clear-collect sande
								***************************************	***************************************	· · · · · · · · · · · · · · · · · · ·
									***************************************	· · · · · · · · · · · · · · · · · · ·
			TOTAL .	*******						·····
					***************************************					*******
						1				WHITE AND THE STATE OF THE STAT

SIGNATURE(S):



Page_*i_* of <u>___</u>

Project Site Name: Project No.: [] Domestic Well Da [X] Monitoring Well [] Other Well Type: [] QA Sample Type:	npage Site	1		Sample Lo Sampled E C.O.C. No Type of Sa [X] Lo	ocation: By: :			
. ,				***************************************		Concent	Ialion	
SAMPLING DATA:								
Date: 1-17-/2	Color	pH	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1515 Method: Low Flow - Grundfos	(Visual)	(S.U.)	(mS/cm)	(⁰ C)	(NTU)	(mg/l)	(%)	(mV)
PURGE DATA:	<u> </u>	16.7 F	0.463	15.86	6.8	7.05	no escipciote de ligação	208
* A								
Date: 1-17-12	Volume	рH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos		-						
Monitor Reading (ppm): O.O	•							
Well Casing Diameter & Materia	ıl							
Type: ス " Schedule 40 PVC			See Low F	low Purge Sh	eet for Details			
Total Well Depth (TD): 64"	<i>'</i>							
Static Water Level (WL): 52.	4	Ì						
One Casing Volume(gal/L):							1	
Start Purge (hrs): 1415								1
		1					 	
		<u></u>		•				
Total Purge Time (min): 60		<u> </u>			ļ			
Total Vol. Purged (ga)L): 5.5			and the second of the second					
SAMPLE COLLECTION INFOR	HMATION:							
Analysis		Preservative			Container R	Collected		
TCL VOCs PCBs	···				-mL clear glass	3		
Hexavalent Chron	nium	1,,,			L ambler glass 50-mL plastic b			
Total Metals (Total Cr		HNO3			00-mL plastic t			
Filtered Metals (Total C		HNO3			00-mL plastic b			
TOC		H2SO4			mL amber glas		Series .	
		- 						

*·								
		1						
OBSERVATIONS / NOTES:								
Pump set within screened interv			_					
Hexaudent Chiamic	in Test K	it res	ح- اان	-0.011	49/L			
		•						
Circle if Applicable:					Signature(s):		
MS/MSD Duplicate ID	No.:				1	, ,	10	
						m Roll	1	
						72 "	y	-



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-FW-MWOZ
PROJECT NUMBER:	112G02230	DATE:	1-17-12

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1405	52.78		(0.0.)	*(IIIO/CIII)*		(1119/14)	(Celcius)		76 Or ppt	Initial
1415	52.79	350	6.85	0.447	226	8.98	14.67	231		cloudy (Brown)
1420	52.79	350	7.04	0.406	190	8.89	15.01	220	k	slightly cloudy (Oracon
1425	52.79	350	7.02	0.407	174	8.37	15.36	216		11 11 11
1430	52.79	350	7.03	0.410	156	8.04	15.47	209	6	11 11 11
1435	52.79	350	7.03	0.413	92.3	7.59	15.66	202	_	Tisted (Brown)
1440	52.79	_35o	7.02	6.413	46.5	7.63	15.69	203		Slight Tint (Ten)
1445	52.79	350	7.01	0.411	29.2	7.58	15.72	204		10 11 11
1450	52.79	_350	7.01	0.410	21.3	7.40	15.75	204		clear
1455	52.79	<u> 356</u>	7.00	0.409	17.0	7.32	15.7F	205	4002	clear
1500	52.79	350	6.99	0.407	13.1	7.20	15.80	204		clear
1505	52.79	350	6.98	0.406	11.0	7.14	15.83	205	444	clear
1510	52.79	<u>350</u>	6.98	0.404	9.2	7.11	15.84	207	-	dear
i515	52.79	<u>350</u>	6.97	0.403	6.8	7.05	15.86	208	2# *	clear-collect symple

MII										***************************************

·····							٠			
· · · · · · · · · · · · · · · · · · ·										****
								· · · · · · · · · · · · · · · · · · ·		*****
			***************************************				-			
~~~~							***************************************			~ ************************************
	***************************************									
		"				***-		*********		
								***************************************		
				******						



Page_<u>/</u> of <u>/</u>

Project Site Name: Project No.:	NWIRP Bett 112G02230	npage Site	1		Sample Lo	ocation:	BPS1-Fω-MV		
<ul><li>[] Domestic Well Data</li><li>[X] Monitoring Well Da</li><li>[] Other Well Type:</li><li>[] QA Sample Type:</li></ul>	ta 		· · · · · · · · · · · · · · · · · · ·			). <u>:</u>	tration		
SAMPLING DATA:								irtallingas baki kir	
Date: 1-19-12	Color	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP	
Time: ) 1/10	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)	
Method: Low Flow - Grundfos	clear	6.28	0.182	15.30	3.1	3.90	<u></u>	229	
PURGE DATA:									
Date: 1-19-12	Volume	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP	
Method: Low Flow - Grundfos									
Monitor Reading (ppm): Ø.O									
Well Casing Diameter & Material		-						. 71 7 474144444444444444444444444444444	
Type: 2 " Schedule 40 PVC		1	Soc Low F	Ilou Durgo Ch	not for Details		***********		
		1	See Low F	low Purge Sr	neet for Details		1		
Total Well Depth (TD):	<u> </u>		<u> </u>						
Static Water Level (WL): 51.43	+	-					<u> </u>		
One Casing Volume(gal/L):		<b>_</b>			ļ				
Start Purge (hrs): 1010		<u> </u>	-						
End Purge (hrs): 1110		<u> </u>	ļ						
Total Purge Time (min): 60		<u> </u>							
Total Vol. Purged (Gálit.): 6.5				·					
SAMPLE COLLECTION INFORMA	ATION:								
Analysis		Preser	vative		Container Re	equirements		Collected	
TCL VOCs		HCI 3 40			-mL clear glass	3			
PCBs				2 1-	L ambler glass		2		
Hexavalent Chromiun					50-mL plastic b				
Total Metals (Total Cr and		HNO3			00-mL plastic b			ì	
Filtered Metals (Total Cr ar	nd Fe)	HNO3			00-mL plastic b				
TOC		H2SO4		3 40-	mL amber glas				
		<del>                                     </del>							
		+							
		1			·······				
							P1************************************		
OBSERVATIONS / NOTES:									
Pump set within screened intervals Hexavalent Chromicm	-2 feet off botto Test K	om it res	υ I+ <del>- &gt;</del>	0.01	ng/L				
A	<del></del>								
Circle if Applicable:	Upiski ki lilink	HUGHER			Signature(s	):			
MS/MSD Duplicate ID No.						Ma	of _		



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-FW-MWO3
PROJECT NUMBER:	112G02230	DATE:	1-19-12

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (ma/l \)	Temp.	ORP mV	Salinity % or ppt	Comments
1000	51.43		- (O.O.)		- (ITIO)	(mg/L/)	(Ceiclus)		/« or ppr	7.1.1
1010	51.45	400	5.13	0.203	246	10.17	13.52	306		Initial
1015	51.45	400	4.88	0.199	221		14.71	298°		cloudy (Brown)
1020	51.45	400	5,20	0.190	88.4	9.26	14.90	270 270		
1025	51.45	400	5.59	0.185	38.7	9.16	15,10	232		Tisted (Tan)
1030	51.45	400	5.97	0.183	24.0	9.08	15.21	734 720	***	
1035	51.45	400	6.13	0.184	15.2	9.07	15.16	221	-	Slight Tiot (Ten)
1040	51.45	400	6.26	0.184	11.0	9.07	15.15	223	•	clear
1045	51-45	400	6.24	0.183	<u> </u>	8.99	15.21	227	-	clear
1050	51.45	400	6.29	0.183	5.0	8.92		226	v	clear
1055	51.45	400	6.30	0.183	4.8	3.95		226		<u> </u>
1100	51.45	400	6.29	0.182	4.0	8.93	15.32	228	•	clear
1105	51.45	400	6.28	0.182	3.6	8.92	15.29	228		clear
1110	51.45	400	6.28	0.182	3,1	8.90	15.30	229		clear-collect sample
			<u> </u>		<b>7</b> / -	2 / 0	77.00			Lieu Wile El Bergie
	***************************************		***					***************************************		**************************************
					***************************************		****			
				**					****	
									7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	***************************************
			***************************************							
								7****	***************************************	
		, i							· - · · · · · · · · · · · · · · · · · ·	······································
					***************************************		****			
					***************************************			V1000000		
				***************************************						· · · · · · · · · · · · · · · · · · ·
					*-					· · · · · · · · · · · · · · · · · · ·
			`							
	***************************************							***************************************	·····	<u> </u>

SIGNATURE(S):



Page \ of \

Project Site Name: Project No.:  [] Domestic Well Date [X] Monitoring Well If [] Other Well Type: [] QA Sample Type:		npage Site 1			Sample ID No.: BPS1 Sample Location: Sampled By: C.O.C. No.: Type of Sample: [X] Low Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular Concenticular C			
CALIDI NIO MATA ESSENZA			1 · · · · · · · · · · · · · · · · · · ·					
SAMPLING DATA:	UEAGIERAU TUU ET UUT							Historia
Date: 1-19-12	Color	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: O917 Method: Low Flow - Grundfos	(Visual)	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	(mV)
PURGE DATA:	clear	11/21	0.339	13.13	2.63	5.20	0,02	
		nekilenterdege L						
Date: 1-19-12	Volume	Hq	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos		ļ	<u>                                     </u>					
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 4 " Schedule 40 PVC			See Low F	low Purge SI	heet for Details			
Total Well Depth (TD): 130.5	7							
Static Water Level (WL): 42.1				***********				
One Casing Volume(gal/L):							<del> </del>	
Start Purge (hrs): ONO								
			<del> </del>		-		<del> </del>	
End Purge (hrs): 0917			ļ					
Total Purge Time (min): 67								
Total Vol. Purged (gal/L): 🖇 ५ ५		<u> </u>	]					
SAMPLE COLLECTION INFOR	MATION:							
Analysis	****	Preser	vative		Container Re		;	Collected
TCL VOCs		7			)-mL clear glass	·	yes	
PCBs	t				L ambler glass			yes
Hexavalent Chrom Total Metals (Total Cr		HNO3		******	50-mL plastic b	********		NO
Filtered Metals (Total Ci		HNO3		***************************************	00-mL plastic b		ww.:	NO NO
TOC	rana rej	H2SO4		•	·mL amber glass		***************************************	
		112001		0 70	THE difficer glass	o viaio	·····	_ ^∘
· · · · · · · · · · · · · · · · · · ·							***************************************	
	****				· · · · · · · · · · · · · · · · · · ·			
				*****				
OBSERVATIONS / NOTES:								
No stains or odo	₹5			High	Hg			
Pump set within screened interva	-	m		3	•			
Hexavalent Chromium Test Kit R								
	_ ,	)'						
Olerate M. Americant					Tat			
Circle if Applicable:			1000110446	(20	Signature(s)	. ر څ	<b>つ</b> 。	
MS/MSD Duplicate ID N	No.: — BPSI-D	NDZ.	-Mia	000 ) \(\)	6		5/1/18	
	- DF-1"U	د صون	-11-10	المال			-200-01	



PROJECT SITE NAME: PROJECT NUMBER:

NWIRP Bethpage Site 1 112G02230

WELL ID.: DATE:

							·		1	
Time	Water Level	Flow	рH	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	Confidents
018C	42.11									
2815	42.96	500	11.02	0,399		8.06	12.87	79	0,02	Clear
9820	43,14	500	11.16	0,410	7.64	5.70	12.83	38	0.02	clear
>825	43.21	375	11.17	0.410	5,02	5,50	13.83	24	G.09_	clear
<u> ৩৪৪৩</u>	43,25	375	11.14	0.406	4.76	5,41	13,02	23	0.02	clear
0835	43.26	375	11.17	0,398	4,22	5.37	13,21	16	C)/O2-	char
0840	43.28	375	11-15	0/389	4,66	5,31	13,30	13	0.02	clear
0845	43,28	375	ニんり	0.386	3,99	5.26	13.40	13	0,02	clear
0850	43,28	375	ルスユ	0,380	4.09	5,21	12.98	H	۵.۵٦	clear
0855	43.28	375	11.37	O. 368	3.68	5.13	12.75	٩	Q'03T	clear 5 gal
C980	43,28	375	ルタロ	0.360	3.31	5/2/2	13,28	9	0.02	clear J
0905	43.28	375	11.22	0.354	2.93	5.23	13,48	વ	0,02	clear
0910	43.28	375	11.19	O-344	2.64	5,24	13,50	11	0.02	Clear
0915	43,22	375	ルスし	O. 339	2,63	ನೆ.೩೦	13.13	it	0.03	char 8 gal
0917	Collect sa	mple						····		
	*****							******	· · · · · · · · · · · · · · · · · · ·	******
		1884	*****							
	····							****	******	
							***			
					******				*******	
						7****		***************************************	******	, , , , , , , , , , , , , , , , , , ,
	****							·····		
					*****				*****	
										· · · · · · · · · · · · · · · · · · ·
	- : : : : : : : : : : : : : : : : : : :		*****					******		

SIGNATURE(S):

PAGE_(-OF/_



# GROUNDWATER SAMPLE LOG SHEET

Page<u> |</u> of ___

Project Site Name Project No.: [] Domestic We [X] Monitoring [] Other Well T [] QA Sample	112G02 ell Data Well Data ype:	P Bethpage Site 2230	1		Sample Lo Sampled E C.O.C. No Type of Sa [X] Lo	ocation: By: :	BPS1-77-MV	ration		
SAMPLING DATA:		al ni rein en estator	danese Histori	LEFFE IRONARA	New Pelos Indonesia		Salastes i Baltos Bee	riselie wat tuga tipik ilikuka a sikili a		
Date: 1-17-/2	Col	or pH	s.c.	Temp.	Turbidity	DO	Callater	000		
Time: 1140	(Visu	'	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	Salinity	ORP		
Method: Low Flow - Grun			0.826	17.12	(110)	8.08	(%)	(mV) 262		
PURGE DATA:						0.00		<u> </u>		
Date: 1-17-12	Volu	me pH	s.c.	Temp.	Turbidity	DO	Salinity	ORP		
Method: Low Flow - Grun			1	t Chip.	Tarbialty	- 50	Jannity	OAF		
			<del> </del>		+	***************************************	<del>                                     </del>			
Monitor Reading (ppm):							<u> </u>			
Well Casing Diameter & I	<del> </del>									
Type: 2 " Schedule 40		<u> </u>	See Low F	low Purge SI	neet for Details		<del></del>			
Total Well Depth (TD):										
Static Water Level (WL):	51.09									
One Casing Volume(gal/L	_):									
Start Purge (hrs):	40				***	· · · · · · · · · · · · · · · · · · ·				
	40		····							
Total Purge Time (min):	60									
Total Vol. Purged (gal/L):							-			
SAMPLE COLLECTION		trias muitataines	tkojapas pilototija		nga cáglaga para ich is	Alaktorechtekt	Si Delegasista (sauta.			
Analysi		Prese	rvative		Container Re	atrements		Collected		
TCL		HCI	140,00	3.40	-mi_ clear glass			3		
PC	Bs			*****	L ambler glass			2		
Hexavalent	Chromium				50-mL plastic b					
Total Metals (T	otal Cr and Fe)	HNO3		1 5	00-mL plastic b	ottle		1		
Filtered Metals (	Total Cr and Fe)	НИОЗ		1 5	00-mL plastic b	ottle				
TC	OC .	H2SO4		3 40-	mL amber glass	s vials				
	T18844444			<del></del>			· · · ·			
						*****				
							*****			
						·······				
OBSERVATIONS / NOTI	ES: Market Hall Hall			yangan Yan			ari migilikish k			
			a vinci grupe (Mini aver		men en en en en en en en en en en en en e	, againg the transport (DELP).	and a cast of the first of the first	suma and englishing at ESM (1995)		
_										
Pump set within screened										
Hexavalent Chromium Tes	st Kit Hesult : 🙆 , i	olmg/L								
			-							
Circle if Applicable:	kario baliya			uga beneri	Signature(s)	:				
MS/MSD Duplic	Duplicate ID No.:					7 7 7 7 7 7				
		_			(ist A)					
					1					



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPS1-TT-MW301\$
PROJECT NUMBER:	112G02230	DATE:	1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp.	ORP mV	Salinity % or ppt	Comments
1035	51.09			_	4	~	<u> </u>		—	Intial
1040	51.11	400	5.99	0.029	26.4	8.54	14.40	234	<del></del>	clear
1045	51.11	400		0.028	9.6	7.93	15.34	239	<b>*</b>	clear
1050	51.11	450	6,09	0.028	7.0	3.30	16.51	248	*	clear
1055	51.11	400	6.70	0.027	2.9	8.18	16.62	249	Sales.	clear
1100	51.11	400	6.09	0.027	1.3	8.12	16.78	250	•	der
1105	51.11	400	6.10	0.027	0.6	8.20	16.89	249	****	clear
1110	51.1(	400	6.10	0.027	0.2	8.27	16.91	253	-	clear
1115	51.11	400	6.09	0.026	0.0	8.33	16.93	253	-	clear
1120	51.41	400	6.08	0.026	0.1	8.22	17.00	255	~ <del>~</del>	clear
1125	51.11	400	6.68	0.026	6.1	8.13	17.05	257	<del></del>	Clear
1130	51.11	400	6.07	0.026	0.0	8.16	17.11	259	\~	cker
1135	51.11	400	6.07	0.026	O. O	8.11	17.17	261	~	clear
1140	51.11	400	6.06	0.626	6.0	9.08	17.12	262		clear · culled sample
			*****							
	······									
	*******									
	V*******									
	······									
	**********									
						_				
	***************************************									***************************************
	***************************************									***************************************
		*****								
	***************************************									
										***************************************
				ł						***************************************

SIGNATURE(S):



# GROUNDWATER SAMPLE LOG SHEET

Page <u>1</u> of <u>1</u>

Project Site Name: Project No.:	NWIRP Beth 112G02230	page Site	<u></u>		Sample ID No.: BPS1-TT-MW301F4117 Sample Location: BPS1-TT-MW3017 Sampled By: VAS					
[] Domestic Well Data [X] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	1	,, , , , , , , , , , , , , , , , , , ,			Sampled E C.O.C. No Type of Sa [X] Lo [] High	***************************************				
SAMPLING DATA:			41.1847(21865)							
Date: 1-17-12	Color	рН	s.c.	Temp.	Turbidity	DO	Salinity	ORP		
Time: 1305	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)		
Method: Low Flow - Grundfos	elear	5.80	2.632	13.94	0.1	8,74		280		
PURGE DATA:										
Date: 1-17-12	Volume	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP		
Method: Low Flow - Grundfos										
Monitor Reading (ppm): りょひ										
Well Casing Diameter & Material										
Type: 2 " Schedule 40 PVC		•	See Low F	low Purge Sh	eet for Details		•			
Total Well Depth (TD): 141		T	T I							
Static Water Level (WL): 50.95										
One Casing Volume(gal/L):										
Start Purge (hrs): 1205	:									
							<u> </u>			
Total Purge Time (min): 66					:					
Total Vol. Purged (gal/L): 6.5 SAMPLE COLLECTION INFORMA	TION IN ECCENATION	seame a Northallactur		ny diaganatana ay turana a	ta sa nije ber antookka alive inte	ana da kana ang kanang na ka	contribution and a facility	en applicate province of Epocal-a-V co		
	IIUN	Preser	untius		Container Re	- auiromonto		Collected		
Analysis TCL VOCs		HCI	valive	3.40	-mL clear glass			3		
PCBs					L ambler glass			ス		
Hexavalent Chromium				***************************************	50-mL plastic b			1		
Total Metals (Total Cr and	Fe)	ниоз	·		00-mL plastic b	<del>-</del>		1		
Filtered Metals (Total Cr and	d Fe)	HNO3		1 50	00-mL plastic b	ottle		-		
TOC		H2SO4		3 40-	mL amber glas	s vials		-		
		ļ								
					<del>.</del>			***************************************		
		<u> </u>								
***********		<u> </u>					····			
				•						
OBSERVATIONS / NOTES:										
							30 0 000 0 0 0 0 0 0 0			
Pump set within screened intervals ~.  Hexavalent Chromium	2 feet off botto	om Kit res	sults .	→ o.	ol mg/	Ĺ				
					1					
Circle if Applicable:			HUUURA		Signature(s	):	_			
MS/MSD Duplicate ID No.:	Duplicate ID No.:					leAAL				



PROJECT SITE NAME: NWIRP Bethpage Site 1

PROJECT NUMBER: 112G02230

WELL ID.: BPSI-TT-MW30II

DATE: 1-77-72

Time	Water Level	Flow	pН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	m۷	% or ppt	
1200	50.95			-	-		_		ı	Initial .
1205	50.96	420	6.10	0.026	21,3	6.73	12.80	260	_	clear
1210	50.96	400	5.89	0.030	6.5	7.61	13.50	266	-	clear
1215	50.96	400	5.78	0.031	5. i	8.21	13.73	274		clear
1220	50.96	400	5.76	0.031	1,4	8,23	13.64	_ ス チ そー	-	clear
1225	50.96	400	5.76	10.030	1.6	8.35	13.62	278	-	Clear
1230	50.96	400	5.76	0.031	08	8 32	13.63	279	-	des
1235	50.96	400	5.76	6.031	6.5	8.29	13.57	280	***	Clear
1240	50.96	400	5.77	6.032	0.6	8.36	13.64	28 <b>6</b>	-	cleds
1245	50.96	400	5.77	0.031	0.4	8.40	13.75	279	<b></b>	dest
1250	50.96	400	5.78	0.632	0.3	9.47	13.84	<i>278</i>		clear
1255	50.96	400	5.79	0.032	0.3	8:57	13.93	279	<b>-</b>	clear
1300	50.96	400	5.80	8.032	0.2	8.65	13.99	2 <b>7</b> 9	-	clear
1305	50.96	400	5.80	8.032	Q. i	8.74	13.94	280		clear-collect supple
			,							***************************************
	-									
			-							
								Ì	***************************************	

SIGNATURE(S): MARK



Page<u> /</u> of <u>/</u>

Project Site Name Project No.:	112G02230		1		Sample ID No.: BPS1-TT-MW3 Sample Location: BPS1-TT Sampled By: VAS			<u>7-0117-2612</u> N <u>301-</u> 0
[] Domestic We [X] Monitoring \ [] Other Well Ty [] QA Sample T	Well Data ype:	No.			C.O.C. No Type of Sa [X] Lo	o.:	tration	
SAMPLING DATA:		ja kantanin	žložnos post			need out wit		
Date: 1-17-12	Color	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Time: <b>09.5</b> 0	(Visual)	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grund	dfos clear	5.78	0.397	14.48	0.0	5.15		263
PURGE DATA:								
Date: 1-17-12	Volume	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grund	dfos	T						***************************************
Monitor Reading (ppm):	8.0			***************************************	<u> </u>			
Well Casing Diameter & N	/laterial			*****				
Type: 2 " Schedule 40		_l	See Low F	Iow Purge Sh	neet for Details		<u></u>	
Total Well Depth (TD):		1	1	IOW   GIGO C.	leer to Detaile		1	
Static Water Level (WL):		+						
One Casing Volume(gal/L		-						
Start Purge (hrs): 08		+						
				***			<u>                                     </u>	
	50	1	<del>  </del>					
Total Purge Time (min):		<del> </del>	<u> </u>			<u> </u>		
Total Vol. Purged (gal/L):				to the Landau and James	1 10 11 10 11 10 10 10 10 10 10 10 10 10			
SAMPLE COLLECTION								
Analysis TCL V		Preser	vative	0.40	Container Re			Collected
PCI	***************************************	HCI			-mL clear glass L ambler glass		3	
Hexavalent	····				L ambier glass 50-mL plastic b		<u>z</u>	
Total Metals (To		HNO3			00-mL plastic b			1
Filtered Metals (1		HNO3		****	00-mL plastic b			-
ТО		H2SO4		***************************************	mL amber glas			<b>~~</b>
		1						
***************************************								
		<u> </u>						
							·	
		<u> </u>						
OBSERVATIONS / NOTE					miner ne reasta que a a co			
ODSERVATIONS				Million (1966)	<u>Kidolijani totalje e i</u>	Järki i Puherpar	Di Changara y	
Pump set within screened Hexavalent Chromium Tes								
C								
Circle if Applicable:		Polyburns	REPRESE	ARARA(Sa	Signature(s)	:		
MS/MSD Duplica	<u>-</u>			U	RAK	2		



PROJECT SITE NAME: PROJECT NUMBER:

NWIRP Bethpage Site 1

112G02230

WELL ID.: DATE:

BPS1-TT-MW301D 1-17-12

Time (Hrs.)	Water Level	Flow	pH	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
		(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
0840	51.75		-			-				Intrai
0850	51.76	400	5.89	0.506	22.2	7.49	13.06	297		clear
0855	51.76	400	5.89	0.492	3.6	5.91	13.74	253		clear
0900	51.76	400	5.89	0.490	0.5	5 77	14.09	246	· -	clest
0905	51.76	400	5.90	0.488	o, 3	5.67	14.19	247	<del></del>	clear
0910	51,76	400	5.90	0.471	0.1	5.53	14,26	249	_	clesr
0915	51.76	400	5.88	0.449	0.2	5.40	14.24	252		clear
8928	51.76	400	5.85	0.446	0.1	5.41	14.30	253	<u> </u>	clear
0925	51.76	400	5.84	0.434	0.1	5.29	14.34	255	_	clear
0930	51.76	400	5.82	0.418	0.1	5.18	14.38	256		cleer-
0935	51.76	400	5.80	0.402	0.0	5.27	14.45	257	_	cker
0940	51.76	400	5.78	0.399	0.0	5.31	14.47	259	-	clear
0945	51.76	400	5.78	0,397	0.0	5.26	14.46	Z6 /	\mu_	clear
0950	51.76	400	5.78	0.397	0.0	5.15	14.48	263		clear
									******	
									· · · · · · · · · · · · · · · · · · ·	
									*******	
				****	7.00000			********	****	******
			VIIII.	7-77/4						VIII
		7,,,,,,,		***************************************	VIII		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***************************************	***************************************	- William - William -
***************************************			· · · · · · · · · · · · · · · · · · ·			-	VFIW.		···	
	***************************************		***************************************					*******		
	· · · · · · · · · · · · · · · · · · ·		***************************************				····			
							······			
										Allen
	*****									
										***************************************
***************************************	***************************************						····			
1		0 ( )								

SIGNATURE(S):

PAGE__OF___



Page L of L

Project Site Project No.		NWIRP Betl 112G02230	npage Site	1		_Sample ID Sample Lo	-TT-MW301b BPS1-7T-M	-01232012		
[] Dome [X] Mon	stic Well Data itoring Well Data					Sampled E C.O.C. No Type of Sa	By: .: ample:	J. Birke		
	Well Type: ample Type:					[X] Low Concentration [] High Concentration				
SAMPLING DA	TA:							Balli Wing Fish	Sister Halletter	
Date: )-つ	3-12-	Color	Нq	S.C.	Temp.	Turbidity	DO	Salinity	ORP	
Time: 122	<i>SO</i>	(Visual)	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	(mV)	
Method: Low Flo	w - Grundfos	Clent	5,91	0.539	13,95	4.40	4.47	0.03	154	
PURGE DATA:					viktimeteri					
Date: 1-27	3-12	Volume	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP	
Method: Low Flo	w - Grundfos				***************************************					
Monitor Reading	(ppm):				*****					
Well Casing Dia										
Type: 2 "Sci		<del></del>	<u> </u>	Soolows	low Durgo Ch	neet for Details		<u> </u>		
Total Well Depth				See LOW I	low Fulge Si.	leet for Details				
	rel (WL): <b>51,</b> 83						***************************************			
	***************************************						<del></del>			
One Casing Volu	6.1									
Start Purge (hrs)			<del>                                     </del>				****	<u> </u>		
End Purge (hrs):										
Total Purge Time										
Total Vol. Purged										
SAMPLE COLL	ECTION INFORMA	TION:								
	Analysis		Preserv	vative		Container Re	quirements		Collected	
	TCL VOCs		HCI			-mL clear glass			Λο	
	PCBs					L ambler glass		***	A0	
	exavalent Chromium	m-\				50-mL plastic b			yes_	
	Metals (Total Cr and Metals (Total Cr and		HNO3			00-mL plastic b			100	
i illered	TOC	ıre)	H2SO4			00-mL plastic b mL amber glass			Λο	
	100		112304		3 40-1	nic amber glass	s viais		Λô	
·	7-74HM41				******	//////	· · ·		with the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of t	
· · · · · · · · · · · · · · · · · · ·					********	<del>.</del>				
									**************************************	
									**************************************	
OBSERVATION	S / NOTES:		HINIMARK							
No stai	ins or odors	5 fm - 4 - 55 ls - 15 -								
Fump set within s Havaralant Chron	screened intervals ~2	z reet off botto	m 1.							
mexavalent Chroi	mium Test Kit Result	10,09	mg/L	•						
			-							
Circle if Applica	ble:	işta tarşinçe	Hinkline.	Market ja	na graina	Signature(s)	•			
MS/MSD Duplicate ID No.:							5			
						Coll Coll				



PROJECT SITE NAME: PROJECT NUMBER:

NWIRP Bethpage Site 1 112G02230 WELL ID.: DATE: BPSI-TT-MW301D-

Time (Hrs.)	Water Level	Flow	pH (S.U.)	S. Cond.	Turb.	DO (mg/L)	Temp.	ORP mV	Salinity % or ppt	Comments
1444	51.83	(1111-7   VILL 11-7	(O.O.)	s(IIIO/OIII) s	SW ( TURN ) PAR	[2(111 <b>9)11</b> ]	<u> </u>	125-13-14 B 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
1046	51.83	400	6,15	0,603	9.00	6,30	13,49	209	50,0	cleny
1851	5.88	406	6,14	G.597	6.6	5,40	1273	17-9	80,0	clear
1456	5.88 51.88	400	5.99	0.618	5,04	4,93	13.10	169	003	clear
1201	51.88	400	5,96	0,613	8.31	501	13.28	161	6,03	clear
1206	51.88	400	5.96	0,604	8.28	4.25	13.57	151	0.03	clear
1211	51.88	400	5.95	0.590	9.96	4.80	13.73	152	0.63	clen
1216	51-88	400	5.94	0,563	7.72	4.86	13.84	157	<b>ం</b> త్ర	clear
1221	51.88	400	5,92	0.546	5.81	4.58	13/12	152	०,०3	2600
1226	51.38	400	5,91	0.539	4,40	4.47	13,95	154	C0-03	clear 5gal
1230	Collect sam									
			······							
	<u></u>									
	,									
									` `	
					·					
			^							
									· v	

SIGNATURE(S):

PAGE OF



								Page_	of
[X] Moni [] Other [] QA Sa	: stic Well Data toring Well Dat Well Type: ample Type:	NWIRP Beth 112G02230	npage Site	1		Sample IE Sample Lo Sampled E C.O.C. No Type of Sa [X] Lo	VAS tration	\$-01262012 N302 <b>\$</b>	
SAMPLING DAT					skritinnikų				
Date: 1 - 20		Color	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Time: 092 Method: Low Flor		(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
PURGE DATA:	w - Grandios	clear	6.36	0.040	16.62	0.4	7.23		220
Date: /- 20	<u> </u>	Volume		60				21   14   14   15   15   15   15   15   1	
Method: Low Flor		VOIUITIE	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
					7.111004	-		ļ	
Monitor Reading									
Well Casing Diar									
Type: "2_" Sch			1	See Low F	low Purge Sh	eet for Details			
Total Well Depth									
Static Water Lev	el (WL): <b>42.41</b>	ļ	ļ						
One Casing Volu	me(gal/L):								
Start Purge (hrs)	: 0820								
End Purge (hrs):	0920								
Total Purge Time	e (min): 60								
Total Vol. Purged	(gal/2): 6.5		~~~~						A-T-T-T-T-T-T-T-T-T-T-T-T-T-T-T-T-T-T-T
	ECTION INFORMA	TION:							
	Analysis		Preser	vative		Container Re	equirements		Collected
	TCL VOCs		HCI		3 40-	mL clear glass	vials		<b>3</b>
	PCBs				2 1-1	L ambler glass	vials		2
	exavalent Chromium	· <u>····</u>				0-mL plastic b			
	Metals (Total Cr and		HNO3			00-mL plastic b			i
Fillered	Metals (Total Cr and TOC	a re)	HNO3 H2SO4			00-mL plastic b	790		
	100		IN25U4		3 40-1	mL amber glas	s viais		
					-				
			<u></u>						
OBSERVATION	S / NOTES:								destarbetarbeta.
Pump set within s Hex≥vele¬	screened intervals ~.	2 feet off botto , Test A	om Eitre	:s:1+ -	> 0.0	Ing /L			
Circle if Applica	ble:	dikin naje		uu kan k		Signature(s)	:		
MS/MSD	Duplicate ID No.:			·				1 -	
·	-						et to	12	



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-TT-MW302\$
PROJECT NUMBER:	112G02230	DATE:	1-20-12

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH (S.U.)	S. Cond.	Turb. (NTU)	DO (mg/L)	Temp.	ORP mV	Salinity % or ppt	Comments
			(5.0.)	(mo/cm)	(NIU)	(IIIg/L)	(Ceicius)		% or ppt	Initial
0815	42.41	400	5.84	0.095	52.0	7.36	13.78	237-	~	Tinted (Tan)
0925	42.43	400	6,16	0.052	9.7	7.83		237	togen.	clest
0830	92.43	400	6.24	0.047	7.0	7.91	16.12	208	*:DEA	clear
0835	42.43	400	6:30	0.044	2.3	7.34	16.36	21.3	****	clear
0840	42.43	400	6.36	0.044	2.1	7.26	16.24	2/2	est <del>an</del>	clear
0845	42.4.3	400	6.37	0.043	0.9	7.28	16.22	209	****	clear
6850	42.43	400	6.40	0.045	1.3	7.19	16,30	202	· ~	c/ear
0855	42.43	400	6.42	0.046	1.0	7.13	16.37	209		clear
0900	42.43	400	6.41	0.045	0.8	7.20	16.41	211		Clear
0905	42.43	400	6.39	0.043	0.6	7.24	16.50	217	-	clear
0910	42.43	400	6.38	0042	0.4	7.19	16.56	215		elear
0915	42.43	400	6.37	0.040	0.5	7.21	16.60	218	sar .	Slede
0920	42.43	400	6.36	0.040	0.4	7.23	16.62	220	1675	clear-collect scroke
										,
			,							
		1 A/C								

SIGNATURE(S):



Page / of /

Project Site Name: Project No.:  [] Domestic Well Data [X] Monitoring Well Dat [] Other Well Type:	NWIRP Bett 112G02230 a	npage Site	1		Sample ID Sample Lo Sampled I C.O.C. No Type of Sa [X] Lo	BPS1-77-M	II - 8/2626/2 N 362 <b>I</b> (	
[] QA Sample Type:					_ [] Higl			
SAMPLING DATA:					au nakanga.	J RESTORY I I I I P	sy au au is, y ny o	
Date: 1-20-/2	Color	Hq	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1045	(Visual)	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	Clear	5.36	0.125	15.33	0.4	6.87	_	308
PURGE DATA:								
Date: /-20-/2	Volume	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos		ļ						
Monitor Reading (ppm): 6.0								
Well Casing Diameter & Material								
Type: 🙎 " Schedule 40 PVC			See Low F	low Purge Sh	eet for Details		***************************************	***************************************
Total Well Depth (TD):						***************************************		
Static Water Level (WL): 42.47								
One Casing Volume(gal/L):								
Start Purge (hrs): 0945								
End Purge (hrs): 1045			<u> </u>	v			***************************************	
Total Purge Time (min): 60		<u> </u>						
Total Vol. Purged (gal/c): 6.5							<u> </u>	
SAMPLE COLLECTION INFORMA	I TIONN COMMI	Stolationsus	n naklalaviosan	istorius reipilėstis:	Hatada Alabada ba	naskatal krátelecs	und national management	
Analysis	iji O i Wasaya ngan	Preser	vative		Container Re	auiremente		Collected
TCL VOCs		HCI	vaaro	3 40-	mL clear glass	•	*******	3
PCBs					L ambler glass	***************************************		2
Hexavalent Chromium					50-mL plastic b			4-
Total Metals (Total Cr and	Fe)	ниоз		1 50	00-mL plastic b	ottle		
Filtered Metals (Total Cr and	d Fe)	ниоз		1 50	00-mL plastic b	ottle		47=
TOC		H2SO4		3 40-1	nL amber glas	s vials		
***************************************		<del>                                     </del>						
	***************************************			WHE.				
OBSERVATIONS / NOTES:			YAHUMU		\$48,69,080,48		74 9 4 4 10 GM (C	
Pump set within screened intervals ~ Hexauelent Chromics	2 feet off botto	om R. t re	sult-	→ 0.0	o mg/L			
Circle if Applicable:			Energy extension	110,4740,14111	Signature(s)			
MS/MSD Duplicate ID No.:	ann a bhe ghal a' ballaile	and favor folia	and design to the f	a aftan (f. j. l. j. j. j. j.	orginature(S)	, <u>.</u>		
monitor Dupitcate in No.:					,	1 Am	40	
	_				$\mathcal{L}$	11 K)		



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-TT-MW302II
PROJECT NUMBER:	112G02230	DATE:	1-20-12

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp.	ORP mV	Salinity % or ppt	Comments
0940	42.4∓	(1111-/ WIII Ia)	(3.0.)	*(III3/CIII)*	(NTO)	(IIIY/E)	(Celcius)		- or ppr	Initial
0945	42.48	375	5.81	0.122	63.7	7.99	14.25	274		Tinted (Brown)
6950	42.48	400	5.57	0.124	35.6	7.03	14.60	263	naces	slight Tint (Ten)
6955	42.48	400	5.47	0.123	40.1	7.03	14.56	272		71 11 11
1000	42.48	400	5.43	0.123	32.0	6.95	14.80	276	4938	11 11 11
1005	42.48	400	5.38	0.124	13.2	7.00	14.77	287	1	clear
1010	42.48	480	5.32	0.124	5.9	6.98	15.06	294		clear
1015	42.48	400	5.37	0.124	2.8	6.95	15.11	297	-	cless
1020	42.48	400	5.37	0.124	2.1	6.97	15.10	300	\$\tag{2}	clear
1025	42.48	400	5.37	0.125	1.4	6.94	15.11	302	4,000	clear
1030	42.48	400	5:35	0.124	1.5	6.39	15.16	304	<b>→</b>	clear
1035	42.48	400	5,36	0.125	0.8	6.90	15.22	306	WES .	clear
1040	42.48	400	5.36	6.125	0.6	6.85	15.30	30F	-	clear
1045	42.48	400	5.36	0.125	0.4	6.87	15.33	308	04.3k	Clear-collect semple
										/
			`							
					:					

SIGNATURE(S):



#### **GROUNDWATER SAMPLE LOG SHEET**

Page of Project Site Name: NWIRP Bethpage Site 1 Sample ID No.: BPS1-TT-MW30272-01202012 Project No.: 112G02230 Sample Location: BPS1-TT-MW 302ID Sampled By: J. Birket [] Domestic Well Data C.O.C. No.: [X] Monitoring Well Data Type of Sample: [] Other Well Type: [X] Low Concentration [] QA Sample Type: [] High Concentration SAMPLING DATA: Date: 1-20-12-Color pΗ S.C. Temp. Turbidity DO Salinity ORP 1115 Time: (Visual)  $(^{0}C)$ (S.U.) (mS/cm) (NTU) (mg/l) (%) (mV) Method: Low Flow - Grundfos 6/193 4.78 C leav 564 6,54 5,72 0,01 218 PURGE DATA: Date: 1-20-12-Volume На S.C. Temp. Turbidity DO Salinity ORP Method: Low Flow - Grundfos Monitor Reading (ppm): ~ Well Casing Diameter & Material Type: 🔍 " Schedule 40 PVC See Low Flow Purge Sheet for Details Total Well Depth (TD): Static Water Level (WL): 42.71 One Casing Volume(gal/L): --1017 Start Purge (hrs): 1115 End Purge (hrs): Total Purge Time (min): 58 Total Vol. Purged (gal/L): 🖁 🦏 SAMPLE COLLECTION INFORMATION: Analysis Preservative **Container Requirements** Collected TCL VOCs HCI 3 40-mL clear glass vials ves **PCBs** 2 1-L ambler glass vials *اد ج* Hexavalent Chromium 1 250-mL plastic bottle no Total Metals (Total Cr and Fe) ниоз 1 500-mL plastic bottle Ves Filtered Metals (Total Cr and Fe) ниоз 1 500-mL plastic bottle No TOC H2SO4 3 40-mL amber glass vials 10 **OBSERVATIONS / NOTES:** No Stairs or odors Pump set within screened intervals ~2 feet off bottom Circle if Applicable: Signature(s) MS/MSD Duplicate ID No.: In But A



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-TT-MW302I2
PROJECT NUMBER:	112G02230	DATE:	1-20-12

Time	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
1017	42.71	*	<u> </u>		\$ \$ 1 ·					
1023-	42.72	600	8.26	1810	44.9	6.79	13.11	117	0.01	clend w/VF sold
1027	42,72	600	7.26	0,125	48,2	7.34	15.13	174	0.01	Clear w/ VF sand
1032	42.72	600	6.58	0.127	48.5	7.71	15.54	೩೦	0.01	clenv
1037	42,72	500	6,19	0.189	30,1	6.47	15,16	スマン	<u> </u>	clear
1042	42.72	500	5.84	0,191	18,5	5.89	15.05	ねる!	0,01	clear 5 gal
1047	42.72	400	5.74	0.192	16.60	5,97	14.52	ダル	O O	cleur
1052	42.72	400	<b>5.</b> 63	0,192	11.2	6,63	14,50	シナ	ر د ا	clenv
1057	412.72	400	5.67	0,192	10.36	6,05	14,20	えほ	0.01	Clear
1102	42.72	400	5,65	0,193	8.93	5.75	14.78	<b>え</b> 15	0.01	clear
1107	42.72	40	5.G	0,43	7.45	5,73	14.90	215	0.01	clear
1112	42.72	400	5,64	0,193	6,54	5.72	14.73	えほ	0.01	clear 8gal
115	Collect same	ole	- "							3
		"								***************************************
		***************************************			***************************************			-	***************************************	
						*******				P-WWWW
***************************************	***************************************									
· · · · · · · · · · · · · · · · · · ·					****					
	****				***************************************					***************************************
,										
	***************************************									
	***************************************					***************************************		··········		
	777774.4.4.4								***************************************	
							***			
	: 		****							
					********					
									***************************************	
								İ		

SIGNATURE(S): Selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection

PAGE / OF



Page _ of _

Project Site Name: Project No.: [] Domestic We [X] Monitoring V [] Other Well Ty [] QA Sample T	112G02230 ell Data Well Data ype:	ta				Sample ID No.: BPS1-TT-MW362 Sample Location: BPS1-TT-M Sampled By: J. Siv k C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration		
SAMPLING DATA:			a i i i i i i i i i i i i i i i i i i i	reus tes la pella balent	tana afaalaa kaasa aa	- 1 1	Control Control Control Control	
Date: 1-20-12- Time: 1000	Color	pΗ	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1000 Method: Low Flow - Grund	(Visual)	(S.U.) <b>9.3</b> ₺₩	(mS/cm)	(°C) 15.16	(UTU)	(mg/l)	(%)	(mV)
PURGE DATA:	ifos clear	- (, ) () () ()	U,267	12/16	cZ,	4.73	0,01	109
	Volume	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grund	lfos	ļ						
Monitor Reading (ppm):	<u> </u>							
Well Casing Diameter & M	Naterial							
Type: "- Schedule 40	PVC		See Low FI	ow Purge Sh	eet for Details			
Total Well Depth (TD):								*********
Static Water Level (WL):	42.98							
One Casing Volume(gal/L)	<u> </u>							
Start Purge (hrs): 632								
1		<u> </u>						
3 3	,,,							***********
Total Purge Time (min):								
Total Vol. Purged (gal/L):			<u> </u>					
SAMPLE COLLECTION I								
Analysis		Preserv	/ative		Container Re			Collected
TCL V		HCI			-mL clear glass			yes_
PCE Hexavalent			<u> </u>	·	L ambler glass v			yes .
	otal Cr and Fe	HNO3			00-mL plastic bo	***************************************		`^6
Filtered Metals (T		HNO3			00-mL plastic bo			yes //a
TO		H2SO4			mL amber glass	***************************************		10 10
		112001		0 40 (	ne amber glass	yida		
	· · · · · · · · · · · · · · · · · · ·					···		
	W			********		*****		
*******								
OBSERVATIONS / NOTE	S: which is the second							
No Stains o Pump set within screened	intervals -2 feet off botte		pН	was h	righ and	would	not sta	bilize
Hexavalent Chromium Tes	it Kit Result : ゟ,ゟゟゕ	1L		57		, ,		, , ,
	<u>`</u>	<i>j</i> .	Noto:	Tubina a	vas a littl Screen	le Short	, but p	robubly
			Vera	top of	5 c Vio 2 11			
			incets	100 01	JUICEN			
Circle if Applicable:	a Bazantza da zanara da la Bazantza da la dario de la Bazantza de la del de la composición de la composición d	e la la callede de la	E A STATE OF THE		Signatura(a)			
	to ID No.	ar a seta ta si Pr	41 % LA 27% (1011) \$1		Signature(s):	7	<b>一</b> 、	
wis/wisb buplica	ite ID No.:				Copar		2	
							~ 711-0	7



PROJECT SITE NAME: NWIRP Bethpage Site 1

PROJECT NUMBER: 112G02230

WELL ID.: BPSI-TT-MW302D

I-20-12

Time	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
0827	42.48									
೦೭3೩	43.04	600	10,73	0,363	671	726	14.86	72	0.02	Clear
0837	43,03	500	10.75	0.365	5,26	610	15.17	57	0.02	د احره
0842	43.03	500	10.72	0.361	9.06	41.75	14.20	53	0.02	clear
0847	43.03	400	10.80	0,358	5,15	4.76	14.34	50	0.07	clear
0852	43.01	400	10.77	0,354	427	4,50	13.96	49	0.02	clear 5 gal
0857	43,0	400	10.68	0342	3,46	3.78	13.92	51	0.02	clear
0305	43,01	400	10.56	0,327	2,42	4.80	14.04	<b>5</b> み	0.02	clear
0907	43,01	400	10,44	0,314	1.96	4.82	14.16	55	0,02	ckerv
0912	43.01	400	10,33	C-304	3/10	4.62		60	002	clear
0917	43.01	400	10,25	0,294	2.70	4.63	14.76	64	0,02	clear
0922	43.01	400	10.22	0,292	Z.88	41.63	14.786	66	ر 0	clear
0927	43.01	400	10.16	0,289	2.37	4,63	14.92	70	ر 0	clear
0932	43.01	400	10.07	0.234	2.87	4.61	14,87	75	ر 0 0	clear
C937	43,01	400	9,93	o,278	<i>کہ65</i>	4.55	14.98	とと	0.07	clear 10gal
0942	4301	400	9.79	ري 2 <b>7</b> 3	2.81	4.64	15.10	28	0.03	clear
0947	43.01 18	191400	9,71	0,270	2,53	4.71	15,07	94	0	clear
095 <b>8</b> 2			9.62	0,268	234	4,66	14,99	99	0	- leave
0957	43.01	400	9.33	0.264	2.19	4.73	15.16	109	0	clear 125gal
1000	Collect Sam	ple 4								3
			***************************************							
	,									_
	<u> </u>			******						
	//////////////////////////////////////									
			`							
	***************************************									

SIGNATURE(S): Jel Beld

PAGE OF



#### **GROUNDWATER SAMPLE LOG SHEET**

Page \ of \ \ Project Site Name: NWIRP Bethpage Site 1 Sample ID No.: BPS1-TT-MW333 -01232012 Project No.: 112G02230 BPS1-TT-MW 3035 Sample Location: Sampled By: [] Domestic Well Data C.O.C. No.: [X] Monitoring Well Data Type of Sample: [] Other Well Type: [X] Low Concentration [] QA Sample Type: [] High Concentration SAMPLING DATA: 1-23-12 pН Color S.C. DO Temp. **Turbidity** Salinity ORP 1049 Time: (Visual) (S.U.) (mS/cm) (°C) (NTU) (mg/l) (%) (mV) Method: Low Flow - Grundfos 0,442 4,26 clar 6.65 16 83 9,71 ひじえ 150 **PURGE DATA:** Date: 1-23 バブ Volume S.C. Temp. Turbidity рΗ DO ORP Salinity Method: Low Flow - Grundfos Monitor Reading (ppm): Well Casing Diameter & Material Type: "> "Schedule 40 PVC See Low Flow Purge Sheet for Details Total Well Depth (TD): Static Water Level (WL): 42 15 One Casing Volume(gal/L): --Start Purge (hrs): 0949 End Purge (hrs): 1049 Total Purge Time (min): 💪 🔾 Total Vol. Purged (gal/L): 7 🤫 🤊 SAMPLE COLLECTION INFORMATION: **Analysis** Preservative **Container Requirements** Collected TCL VOCs HCI 3 40-mL clear glass vials ves **PCBs** 2 1-L ambler glass vials Vec Hexavalent Chromium 1 250-mL plastic bottle  $\Lambda$  $\odot$ Total Metals (Total Cr and Fe) HNO3 1 500-mL plastic bottle (*i*eS Filtered Metals (Total Cr and Fe) HNO3 1 500-mL plastic bottle Λο TOC H2SQ4 3 40-mL amber glass vials 10 OBSERVATIONS / NOTES: No stains or odors Pump set within screened intervals ~2 feet off bottom Hexavalent Chromium Test Kit Result: つ,の/へ/ Circle if Applicable: Signature(s): Duplicate ID No.: BPS1-Dup 04-0123 2012 MS/MSD



PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: NWIRP Bethpage Site 1

NWIRP Bethpage Site 1

NWIRP Bethpage Site 1

NWIRP Bethpage Site 1

NWIRP Bethpage Site 1

NWIRP Bethpage Site 1

NWIRP Bethpage Site 1

NWIRP Bethpage Site 1

Time	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	m۷	% or ppt	0011111101110
0949	42.15								1	
0951	42.15	600	6,23	G,488	78.6	12.92	13.25	156	0.02	tan tint
<u>0956</u>	42.15	500	G,48	0.491	92.4	10:11	14.21	124	0.02	tan tint
1001	42.15	50a	6.49	0,476	62.6	11.54	15.24	119	0.02	clear
1006	42.15	400	6,55	0.467	34.9	10,99	15,50	136	20,0	clear
1017	42.15	400	6,57	0,460	12:0G	10.79	15.91	143	0.02	Clerr
1016	42,15	400	6.60	0,448	14,5	10.54	15.93	147	0.02	Clear
1021	42.15	400	6.63	0.448	10,29	10.51	16,7	141	0.02	clear
1026	42.15	400	6,66	0.441	9.04	10,35	16.79	145	0.02	clear 5 gal
1031	42.15	400	<i>حاحا</i> رچا	0,444	620	1030	16.87	150	0.02	clear
<u> </u>	42.15	400	6.67	0,446	4,51	10,05	6.88	151	0,02	clear
1041	42,15	400	6.65	0,443	4.86	9.91	16.90	155	0.02	clear
1046	42.15	400	6.65	0.442	426	9.71	16.88	156	0,03-	clear 7 gal
1049	Collect 50	mple and	duplicati	'						<u> </u>
		*	•							
<del></del>									•	
					· · · · · · · · · · · · · · · · · · ·					***************************************
			******				····			
					********					
									******	
										y *
	· · · · · · · · · · · · · · · · · · ·				. **********	.,	www.			
NV-1										***************************************
		·····						· · · · · · · · · · · · · · · · · · ·		······································
										м.
								MINUTA.		

SIGNATURE(S):

PAGE / OF /



Page<u>I</u> of <u>I</u>

Project Site Name:	NWIRP Beth	page Site	1		Sample ID No.: BPS1-TT-MW303II-01192612 Sample Location: BPS1-TT-MW303II					
Project No.:	112G02230				- '			N303II		
[] Domestic Well Data					Sampled 6		<u>VAS</u>			
[X] Monitoring Well Data	· n				C.O.C. No Type of Sa					
[] Other Well Type:	,a					ampie: w Concent	rotion			
[] QA Sample Type:			THURSDAY.			n Concentr				
					_ [] [1]	1 Ooncenti	ation			
SAMPLING DATA:								Umberlæjser um		
Date: 1-19-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP		
Time: 1415	(Visual)	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	(mV)		
Method: Low Flow - Grundfos	tan color	9.61	0,206	5.8	339	70,0		<u>−</u> 32		
PURGE DATA:							•			
Date: 1-19-12	Volume	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP		
Method: Low Flow - Grundfos										
Monitor Reading (ppm): P.D	1									
Well Casing Diameter & Material										
Type: Z " Schedule 40 PVC		1	See Low Fl	ow Purge Sh	eet for Details		ŧ	l		
Total Well Depth (TD):		-		ow runge on	Details					
Static Water Level (WL): 42.49		İ								
One Casing Volume(gal/L):							1			
Start Purge (hrs): /2/5	***************************************									
End Purge (hrs): 1415			·.							
Total Purge Time (min): 120										
Total Vol. Purged (gal/l): 14,0		***************************************			****					
SAMPLE COLLECTION INFORMA	TION:				(1931), kala kasaka ka wa	Linda i de la la la la la la la la la la la la la				
Analysis		Preser	vative		Container Re	equirements	ne pecaregraphical entre con-	Collected		
TCL VOCs		HCI		3 40-	mL clear glass	******		3		
PCBs					L ambler glass			2		
Hexavalent Chromium	1				50-mL plastic b			4.0m		
Total Metals (Total Cr and	l Fe)	HNO3		1 50	00-mL plastic b	ottle		1		
Filtered Metals (Total Cr ar	ıd Fe)	ниоз		1 50	00-mL plastic b	ottle		1		
TOC		H2SO4		3 40-г	mL amber glas	s vials		.=		
					<del></del>					
		-				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
OBSERVATIONS / NOTES:	Augusta ang			Isanggi kasasa		rki in lektrise die	t sedest decet to be			
	rgada big podasi si bi	11301151150F		<u> Landente de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition d</u>	illan er endral ofrieds.	(1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	9696134 EV 6516 EVE 5			
Pump set within screened intervals -	-2 feet off botto	nm * /	11	• • •	d i	/ ).				
HEXAUSIENT CATOMIUM	_1=51 K	.thesu	,j <del>r</del>	0.00	mg/L	(ber i Herrie	t Azid .	ideal)		
Pump set within screened intervals - Hexaualent Chromium			<del>}</del>	0.00	Mg/L (	with A	cil Add.	cd)		
					-					
Circle if Applicable:		rinwillaw,			Signature(s)	):				
MS/MSD Duplicate ID No.	:					1 I do				
						ATTO				
					L					



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-TT-MW303II
PROJECT NUMBER:	112G02230	DATE:	1-19-12

Time	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
1205	42.49			-	-	_	_		-	Initial
1215	42.52	300	9.74	0.213	<u> 305 </u>	0.94	14.13	140	-	doudy (Brown)
1220	42.52	300	9.75	0.210	300	0.51	15.20	113	<b>***</b>	11 12
1225	42.52	300	9.75	0.209	313	0.42	15.50	90	K##	11 11
1230	42.52	325	9,74	0.208	339	0.41	15.68	65	e	21 11
1235	42:52	325	4,71	0.208	415	0.39	15.77	49	1,400	11 11
1240	42.52	325	9.71	0.208	430	0.42	15.83	43	-	21 11
1245	42.52	300	9.72	0.208	43z	0.44	15.59	37	+	21 11
1250	42.52	300	9.69	0.207	450	0.41	15.51	29	-	11 11
1255	42.52	300	9.69	0.207	433	037	15.60	21	**	11 11
1360	42.52	300	9.69	0.207	419	D.34	15.62	16		11 11
1305	42.52	300	9.69	0.207	399	0.38	15.75	8	<i>\$</i>	16 11
1310	42.52	300	9.70	0.207	404	0.31	15.80	3	****	11 11
1315	42.52	300	9.69	0.207	397	0.28	15.82	- 2	-	13 11
1320	42.52	300	9.67	0.207	<u> </u>	0.30	15.90	-6	•	11 11
1325	42.52	300	9.67	0.207	390	0.27	15.92	- 11	<del>-</del>	11 11
i330	42.52	300	9.67	0.206	400	0.25	15.91	-/2	-	11 11
1335	42.52	300	9.64	0.206	377	0.21	15.90	-13	•	11 11
1340	42.52	300	9.62	0.206	340	0.19	15.87	-14		11 11
1345	42.52	300	9.60	0.206	400	0.17	15.88	- 18	e	11 11
1350	42.52	300	9.60	0.205	311	0.15	15.88	-24	445	11 11
1355	42.52	300	4.61	0,205	3/4	0.16	15.91	-28	€: <b></b>	11 11
1400	42.52	300	9.61	0.205	3.38	0.13	15.87	- 30	~~	11 11
1405	42.52	<i>3∞</i>	9.61	0.266	342	0.09	15.86	- 32	<b>—</b>	// #
1410	42.52	300	9.61	0.206	348	0.08	15.83	- 31	<b>~</b>	11 11
1415	42.52	300	7.61	0.206	339	0.07	15.81	-32		11 11 Collect
						<u> </u>				

SIGNATURE(S):

PAGE_/OF_/



#### **GROUNDWATER SAMPLE LOG SHEET**

Project Site Name: NWIRP Bethpage Site 1 Sample ID No.: BPS1-17 -MW30372-01192012 Project No.: 112G02230 Sample Location: BPS1-TT-MW303ID Sampled By: J. Birket [] Domestic Well Data C.O.C. No.: [X] Monitoring Well Data Type of Sample: [] Other Well Type: [X] Low Concentration [] QA Sample Type: [] High Concentration SAMPLING DATA: 1-19-12 рΗ Color S.C. Temp. **Turbidity** DO ORP Salinity 1307 Time: (0C) (Visual) (S.U.) (mS/cm) (NTU) (mg/l) (%) (mV) Method: Low Flow - Grundfos 0,01 14.26 clear 5,64 0.124 コルク 4.71 171 PURGE DATA: Date: 1-14-12-Volume S.C. Temp. **Turbidity** DO Salinity рH ORP Method: Low Flow - Grundfos Monitor Reading (ppm): ---Well Casing Diameter & Material Type: 🔍 " Schedule 40 PVC See Low Flow Purge Sheet for Details Total Well Depth (TD): Static Water Level (WL): 4282 One Casing Volume(gal/L): --Start Purge (hrs): 1200 1307 End Purge (hrs): Total Purge Time (min): 67Total Vol. Purged (gal/L): 🞖 🦡 🚺 SAMPLE COLLECTION INFORMATION: Analysis Preservative **Container Requirements** Collected TCL VOCs HCI 3 40-mL clear glass vials Ves. **PCBs** 2 1-L ambler glass vials ¥ @5 Hexavalent Chromium 1 250-mL plastic bottle ye5 Total Metals (Total Cr and Fe) ниоз 1 500-mL plastic bottle Ve5 Filtered Metals (Total Cr and Fe) **EONH** 1 500-mL plastic bottle Λc TOC H2SO4 3 40-mL amber glass vials 10 OBSERVATIONS / NOTES: No stains or edors Pump set within screened intervals ~2 feet off bottom Hexavalent Chromium Test Kit Result : の,の Mg/L Circle if Applicable: gnature(s): MS/MSD **Duplicate ID No.:** 



PROJECT SITE NAME: PROJECT NUMBER:

NWIRP Bethpage Site 1 112G02230

WELL ID.: DATE:

BPS1-TT-MW303I2

Time	Water Level	Flow	pН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
1200	42.82									
1205	42.86	650	5.72	0,127	176	6,58	12,92	141	0,01	tan coler
1210	43.85	656	5.68	0/125	134	10.22		139	0	tan tint
1215	42.86	600	5.65	७/124	63 <i>.5</i>	5.84	14.09	149	ر ب ب	clear
1225	42.82	450	5.70	6.124	41.1	5/20	13,92	5	0.0	clear
1225	42.82	400	5,6°°	6.124	22.7	5.05	13,70	165	9,01	clear
1230	42.82	400	5.69	७,124	14.4	4,48	13,45	16.3	0.01	Clear
1235	42.82	500	5,59	6.125	51.3	5.27	ほうぶる	170	0.00	pump had to be restarted
1240	42.82	400	5.64	0.125	30.5	5.04	13.26	158	ပ .ဝ (	elear Syal
1245	42/82	400	5,65	PE1.0	11/4	4.93	14.00	167	0.01	elear
1250	42.82	400	5.65	0,124	5,44	4.87	14.13	74	6.01	Clear
1255	47.87	400	5.65	6,124	4.45	4.75	14.15	183	0.01	clear
1300	43.82	400	5.65	0/124	4.38	4.75	14.17	188	0.01	cleer
1305	42.82	५००	5.64	0,124	2.19	4.71	14.26	191	001	clear
1307	Collect Sam	سأه							****	
					***************************************					***************************************
							******	*****	******	
			******					*****		
		***************************************			******					***************************************
						·				
							***************************************			
							~~~	******	-	
	······	***************************************								
	***************************************		.,,,,,,	**************************************						V-144-1
	··········					[
	******		***************************************			****				
		·			T		***************************************		· · · · · · · · · · · · · · · · · · ·	······
	1		i			<u> </u>				

SIGNATURE(S):

PAGE OF



Page 1 of 1

Project Site Project No.		NWIRP Beti 112G02230	npage Site	1		Sample Lo	4808h 4808w				
[X] Moni [] Other	stic Well Data itoring Well Data Well Type: ample Type:	a 					.:		<u>et1</u>		
SAMPLING DA	TA:		Liaminty filmi.								
Date: \-\9-\		Color	рН	S.C.	Temp.	Turbidity	DO	Salinity	ORP		
Time: 145		(Visual)	(S.U.)	(mS/cm)	(⁰ C)	(NTU)	(mg/l)	(%)	(mV)		
Method: Low Flo	w - Grundfos	clear	610	0,199	14.07	15.6	5,39	0.01	165		
PURGE DATA:											
Date: \-\9-	12-	Volume	рН	s.c.	Temp.	Turbidity	DO	Salinity	ORP		
Method: Low Flo	w - Grundfos						,,,,,				
Monitor Reading	(ppm):				*********	7 11111111	***************************************				
Well Casing Dia	meter & Material				***************************************			- 			
Type: 🔎 Sch	hedule 40 PVC		<u> </u>	See Low Fl	ow Purge Sh	eet for Details		<u> </u>			
Total Well Depth		7	1		on raige on	COLTOT DOLARS					
	rel (WL): 42.96	***************************************									
One Casing Volu								******			
Start Purge (hrs)	1 12			-			·	<u> </u>			
End Purge (hrs):	- 4			- -			********				
Total Purge Time							********				
				1			F 11111.1.				
	t (gal/L): 13 gs1 ECTION INFORMAT	PLANTE BARBER		I I	Solven des burgers	***************************************					
SAMPLE COLL	ECTION INFORMA	ION.									
	Analysis		Drocer		Preservative			Container Requirements			
	Analysis TCL VOCs		† 	vative	2.40		******		Collected		
	Analysis TCL VOCs PCBs		Preser HCI	vative	***************************************	mL clear glass	vials		yes		
	TCL VOCs		HCI	vative	2 1-L	mL clear glass . ambler glass	vials vials		yes Yes		
He	TCL VOCs PCBs	Fe)	HCI	vative	2 1-L 1 25	mL clear glass . ambler glass v 0-mL plastic bo	vials vials ottle		yes ves		
He Total N	TCL VOCs PCBs exavalent Chromium	······	HCI 	vative	2 1-L 1 25 1 50	mL clear glass . ambler glass	vials vials ottle	A 100 A 100	yes yes no yes		
He Total N	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and	······	HCI HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle	A contract	yes No yes		
He Total N	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and	······	HCI HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes yes no yes		
He Total N	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and	······	HCI HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total N	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and	······	HCI HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total N	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and	······	HCI HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total N	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and	······	HCI HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total N	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and	······	HCI HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total N Filtered	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and TOC	I Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total M Filtered OBSERVATIONS	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and TOC	Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total M Filtered OBSERVATIONS Ao Shain Pump set within s	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and TOC	Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total M Filtered OBSERVATIONS Ao Shain Pump set within s	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and TOC	Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total M Filtered OBSERVATIONS Ao Shain Pump set within s	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and TOC	Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle		yes No yes		
He Total N Filtered OBSERVATIONS Ao Shain Pump set within s Hexavalent Chror	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and TOC S/NOTES: Screened intervals ~2 mium Test Kit Result	Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass ambler glass o-mL plastic be o-mL plastic be o-mL plastic be and p	vials vials ottle ottle ottle vials		yes No yes		
He Total M Filtered OBSERVATIONS Ao Shain Pump set within s Hexavalent Chror	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and TOC S/NOTES: Screened intervals ~2 mium Test Kit Result	Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic bo 0-mL plastic bo 0-mL plastic bo	vials vials ottle ottle ottle vials		yes No yes		
He Total N Filtered OBSERVATIONS Ao Shain Pump set within s Hexavalent Chror	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and TOC S/NOTES: Screened intervals ~2 mium Test Kit Result	Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass ambler glass o-mL plastic be o-mL plastic be o-mL plastic be and p	vials vials ottle ottle ottle vials		yes No yes		
He Total N Filtered OBSERVATIONS Ao Shain Pump set within s Hexavalent Chror	TCL VOCs PCBs exavalent Chromium Metals (Total Cr and Metals (Total Cr and TOC S/NOTES: Screened intervals ~2 mium Test Kit Result	Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass ambler glass o-mL plastic be o-mL plastic be o-mL plastic be and p	vials vials ottle ottle ottle vials		yes No No		



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-TT-MW303D
PROJECT NUMBER:	112G02230	DATE:	1-19-12

Time	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
1340	42.94									
1350	43,01	500	6.52	6,302	587	310	12.06	157	00	tan tint
1355	43.65	260 260	6,38	0/901	240	6,24	13.72	123	0.0	flush TURB out
1400	43,05	<u> 360</u>	6,42	0,302	234	6,30	14-51	112	0,0(tan color
1405	43,05	<u>පි</u> ටථ	6,47	C.303-	203	6.33	14,71	ايم	0.0	ten color
1410	43.01	50O	6.39	७,१५५	129	6.09	14.76	148	0.01	tantint 5 gal
1415	43,01	500	<i>6,</i> 30	0/199	87,2	5.97	14.72	155	10,0	ton tint
1420	43.01	500	6,25	3718	65,3	5.72	14.65	156	0,01	teatit (slight)
1425	43,50	400	6,20	० / १५%	48,9	5/62	14.60	160	0,0	ckar
1436	43.00	400	6.12	0.168	40.2	5.54	14.43	160	0,01	clear agal
1435	43.00	400	610	0,199	34.0	5.55	14.34	162	0.01	Clear
1440	43.00	400	6.13	0.198	23.1	5,44	14.45	161	0.0(Clear
1445	43,00	400	6.11	0.197	70,3	5.33	14.32	161	O-01	clear
1450	43.00	400	6.10	0,199	15.6	5,39	14.07	165	0.01	clear
1452	Collect samp	le								
	•									
									_	
-										
					_					

SIGNATURE(S): Al Ball

PAGE OF 1



Page<u>i</u> of <u>i</u>

Project Site Name: Project No.:	NWIRP Beth 112G02230	page Site	1		Sample ID	- TT- MW <i>304</i> BPS1- 7T -M	04\$-01182012 MW <i>364\$</i>	
[] Domestic Well Data [X] Monitoring Well Data [] Other Well Type: [] QA Sample Type:		Sampled By: C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration						
SAMPLING DATA:	nicht der bei der			9.19.1771.000.000.U.	Time Experience	iasu ngumuy	Jalij istratrasirė	
Date: 1-18-12	Color	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1045	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	545	0.002	17.30	0,1	10.54		253
PURGE DATA:								
Date: 1-18-12	Volume	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								<u></u>
Type: 2 " Schedule 40 PVC		J	00010005	lavo Divisio Oli	<u> </u>]	<u> </u>
. 4			See Low F	low Purge Sn	eet for Details		1	<u> </u>
Static Water Level (WL): 45,46			ļ					
One Casing Volume(gal/L):							ļ	
Start Purge (hrs): 6945		ļ						
End Purge (hrs): 1045								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 60					***************************************			
SAMPLE COLLECTION INFORMAT	TION:							
Analysis		Preser	vative		Container Re	equirements		Collected
TCL VOCs		HCI		3 40-	mL clear glass	s vials		3
PCBs	********			2 1-1	L ambler glass	vials		ス
Hexavalent Chromium				1 25	60-mL plastic b	oottle		•
Total Metals (Total Cr and		HNO3			00-mL plastic t		<u> </u>	
Filtered Metals (Total Cr and	l Fe)	HNO3		- *****	00-mL plastic b			
TOC		H2SO4	*****	3 40-1	mL amber glas			
							ı	
· ************************************				· · · · · · · · · · · · · · · · · · ·	WW		*****	

OBSERVATIONS / NOTES:	akininin.		şişlanıda (Havayan b				atorisa kasasa kasa
Pump set within screened intervals ~2 feet off bottom Hexavalent Chronium Test Kit result -> 0.00 mg/L								
Olega M. Annul' 1-1								
Circle if Applicable:		Hillyldja.	ych Ullinia	Wallingpap	Signature(s):		
MS/MSD Duplicate ID No.:					1	i PA	R	



PROJECT	SITE NAME:
DDO IECT	MIMDED.

NWIRP Bethpage Site 1 112G02230

WELL ID.: DATE:

BPSI-TT- MW304\$ 1-18-12

Time (Hrs.)	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV .	% or ppt	
0935	45.96	3 6 -						*	-	Initial
6945	45.97	400	5.90	0.029	36.3	10.84		235		Slight Tint (Tan)
0950	45.97	400	6.10	0.020	17.4	10.58		235		clear
0955	45.97	400	6.03	0.015	13.2	10.56	16.93	243		clear
1000	45.97	400	5:95	0.0/0	8.5	10.54		252		clear
1005	45.97	400	5.78	0.006	4.8	10.57	17.36	257	Į	clear
1010	45.97	400	5,70	0.005	2.0	10.61	17,28	272		clear-
1015	45.97	400	5.68	0.005	1.0	10.64	17.33	275	· -	clear
1020	45.97	400	5.55	0,005	1.3	10.63	17.30	279		clear
1025	45.97	400	5.52	0,004	ø.4	10.62	17.28	285	THEM	cles-
1030	45.97	400	5.50	0004	0.1	10.62	17.22	292		clear
1035	45.97	400	5.47	0.003	0.1	10.60	17.23	297	-	Gledr
1040	45.97	400	5.46	0.003	0.1		17,28	295	~	clear
1045	45.97	400	5.45	0.002	0. i	10.54	17.30	293		clear-collect sample

								****		· · · · · · · · · · · · · · · · · · ·
***************************************	***************************************									***************************************
			· · · · · · · · · · · · · · · · · · ·				****			
		- 1111-111111		**********						~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
			***************************************						-	
							***************************************		W	
								·········		
									povernin	
										
,										

SIGNA	THE	(C).
SIGIYM	IUNE	[3].

PAGE_/_OF_/



Project Site Name: Project No.: [] Domestic Well I [X] Monitoring We [] Other Well Type [] QA Sample Type	ell Data e:	npage Site 1			Sample ID Sample Loc Sampled B C.O.C. No. Type of Sa [X] Loc [] High	<u>1-01182612</u> N304II		
SAMPLING DATA:	rise i naciona a a su i car		s er salvatryk		ARRECT PAR INTEREST		HITOMESIA Š	
Date: 1-18-12	Color	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1225	(Visual)	(S.U.)	(mS/cm)	(⁰ C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos		667	0.14	15/12	9,2	7,54		209
PURGE DATA:								
Date: 1-18-12	Volume	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos	6							
Monitor Reading (ppm): .								
Well Casing Diameter & Mate	-	<u> </u>						
Type: 2" Schedule 40 P\	1	<u>l</u>	Soo Low El	low Durgo Ch	leet for Details		1	
		T	See Low P	low ruige Sil	leet for Details			
Total Well Depth (TD): //	31	<u> </u>						
Static Water Level (WL): 46		<u> </u>					ļ	
One Casing Volume(gal/L):		<u> </u>	ļ ļ					
Start Purge (hrs): 1/25								
End Purge (hrs): /225						 		
Total Purge Time (min): 6	D			***************************************				
Total Vol. Purged (gal/L): 6								
SAMPLE COLLECTION INF	ORMATION:							
Analysis		Preser	vative		Container Re	quirements		Collected
TCL VOC	Os	HCI			mL clear glass			3
PCBs					L ambler glass			2
Hexavalent Ch Total Metals (Total		HNO3			50-mL plastic bo	······································		i
Filtered Metals (Total	- iu-v	HNO3		***************************************	00-mL plastic bo 00-mL plastic bo			
TOC	ar Or and r cy	H2SO4		***************************************	mL amber glass			
		<u> </u>						
000001/1-2101-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	······································	<u> </u>				375 35 15 15 15 15 15 15 15 15 15 15 15 15 15		
OBSERVATIONS / NOTES:				Alektrist (eph)			William Lines	
Pump set within screened int Hexavalent Chromi	ervals ~2 feet off botto 10~ Test Kii	om Fjesul	セー	0.04.	19/1			
Circle if Appliachles			a Buston Buda 1941 otas	e partuurnumen Bauka	Cianatura/-\	•		
Circle if Applicable: MS/MSD Duplicate	ID No.:				Signature(s):	lu t	AD	
<u> </u>		_				per l		



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-TT-MW304II
PROJECT NUMBER:	112G02230	DATE:	1-18-12

						l			I	
Time	Water Level	Flow	pН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	m۷	% or ppt	Comments
1110	46.22	-		-	-	_	-		~	Intral
1125	46.23	400	7.40	0.182	19.6	10.97	14.24	219	-	clear
1130	46.23	400	7.22	0.178	422	9.69	14.18	200	*com	cloudy (Brown)
1135	46.23	400	6.90	0.170	245	9.13	14.70	173		11 11
1140	46.23	400	6.83	0.162	17ス	8.55	14.80	184		16 11
1145	46.23	400	6.76	0.148	119	7.60	14.84	196	%g-90	Tintel (Tan)
1150	46.23	400	6.74	0.137	77.3	7.52	14.92	200	****	slight Tint (Tan)
1155	46.23	400	6.72	0.131	60.4	7.40	14.97	262	-	11 11 11
1200	46.23	400	6.71	0.123	47.5	7.32	15.01	208	-	11 11 11
1205	46.23	400	6.71	0.120	39.0	7.41	15.00	209	~	11 11 11
1210	46.23	400	6.69	0.117	26.1	7.46	15.03	207		11 11 11
1215	46.23	400	6.69	0.115	164	7.51	15.04	208	***	Clear
1220	46.23	400	6.68	0.114	13.0	7.52	15.09	209	-	clear
1225	46.23	400	6.67	0.114	9,2	7.54	15:12	209	-	clear-collect sample
						`				
	······									
•••••								-		

			******			W				
·	W									
	***************************************		***********							
<u> </u>										
	······································									

	******			·				·		

SIGNATURE(S):	In the	



Page<u> /</u> of <u>/</u>

Project Site Name: Project No.:	NWIRP Betl 112G02230	npage Site	1		_Sample Lo	BPS1-77M\	T2-81182012 N304I2	
[] Domestic Well Data [X] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	a 							
SAMPLING DATA:	H Fortiková se soviete		Historica (1964)		Saabsisens liinensiini	. Herbert and Hebri	especial and stylen and a six of the	
Date: 1-18-12	Color	рH	s.c.	Temp.	Turbidity	DO	Salinity	000
Time: 1400	(Visual)	(S.U.)	(mS/cm)	(⁰ C)	(NTU)		1 -	ORP
Method: Low Flow - Grundfos	clear	5.55	0.473	14.51	1.8	(mg/l) 8.33	(%)	(mV) 286
PURGE DATA:								
Date: 1-18-12	Volume	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								*****
Monitor Reading (ppm): 8.0								
Well Casing Diameter & Material				***************************************				
Type: 2 " Schedule 40 PVC		<u> </u>	See Low F	low Purge Sh	leet for Details			
Total Well Depth (TD): 151			000 2011	low range on	Cet for Details			
Static Water Level (WL): 46.40								
One Casing Volume(gal/L):				***************************************				
Start Purge (hrs): /300				*****				
End Purge (hrs): 1400							<u> </u>	
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6.5							ļ	
SAMPLE COLLECTION INFORMA	TION-	un termoviralni	<u>.</u> Janis karangan karangan	Hidiations and the	usotasuonio min	ideach a chuil i deall.		
Analysis		Preser	vative	harrieres	Container Re	autiremente		Collected
TCL VOCs		HCI		3 40-	mL clear glass	****		6
PCBs					ambler glass		· · · · · · · · · · · · · · · · · · ·	4
Hexavalent Chromium				1 25	0-mL plastic b	ottle	T-W.L.	2
Total Metals (Total Cr and		ниоз		1 50	00-mL plastic b	ottle		2
Filtered Metals (Total Cr and	i Fe)	НИОЗ			00-mL plastic b	*****		•
TOC		H2SO4		3 40-r	nL amber glass	s vials		****
		<u> </u>		·········				
								· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·					***************************************			
	· · · · · · · · · · · · · · · · · · ·							
			~~~~~					
OBSERVATIONS / NOTES:								
Pump set within screened intervals ~2 Hexavale & Chronium	2 feet off botto	m F i	L	1. i.B.	vo //	***************************************		
	1631 71	1 10301	15 /	0.167	19/-			
Circle if Applicable:					Signature(s)	•		
MS/MSD Duplicate ID No.:  BPS1-TT-D	007 - 1		ñe → 16	cohrs)		PAR	)	
101-11-19					200	, , , ,	-	



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-TT-MW304IZ
PROJECT NUMBER:	112G02230	DATE:	1-18-12

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb, (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1250	46.40	-	-			-		***************************************	-	Initial
1300	46.41	400	6.73	0.082	120	11.16	14.10	198	~ <del>~~</del>	Tinted (Tan)
1305	46.41	400	6.17	0.079	116	10.25	14.48	220		11 11
1310	46.41	400	5.74	0.075	47.6	9.66	14.61	246	74004	Slight Tint (Ten)
1315	46.41	400	5.63	0.073	18.2	9.41	14.72	261	****	clear
1320	46.41	450	5,56	0.073	11.7	8.80	14.68	270		clear
1325	46.41	400	5.57	0.073	5.5	8.71	14.64	273	Pres	clear
1330	46.41	400	5.58	0.073	4,0	8.60	14.66	275	:40=	clear
1335	46.41	400	5.57	0.073	3.9	8.58	14.63	286		cles-
1340	46.41	400	5.55	0.073	3.0	8.49	14.65	281	-	clear
1345	46.41	400	5.55	0.073	2.2	8.37	14.61	281	-	clear
1350	46.41	400		0.073	i .9	8.35	14.56	293	- = 4	clear
1355	46.41	400	5.55	0.073	2.0	8.31	14.53	285	**	clear
1450	46.41	400	5.55	0.073	1.8	8.33	14.51	286		clear-collect symple.
	******	*******								
							w	*****		
	******									
			····							
				***************************************						

SIGNATURE(S):

PAGE_/OF/



Page | of | Project Site Name: NWIRP Bethpage Site 1 Sample ID No.: BPS1-TT-MW3895-01192012 Project No.: 112G02230 Sample Location: BPS1-TT-MW309D Sampled By: [] Domestic Well Data C.O.C. No.: [X] Monitoring Well Data Type of Sample: [] Other Well Type: [X] Low Concentration [] QA Sample Type: [] High Concentration SAMPLING DATA: 1-19-17 Date: Color pΗ S.C. Temp. **Turbidity** DO Salinity ORP Time: 1117 (Visual) (0C) (S.U.) (mS/cm) (NTU) (mg/I) (%)(mV) Method: Low Flow - Grundfos Clear 5.85 0,122 14/64 MA 7.91 0.01 190 PURGE DATA: 1-19-12 Date: Volume pН S.C. Temp. Turbidity DO Salinity ORP Method: Low Flow - Grundfos Monitor Reading (ppm): -Well Casing Diameter & Material Type: Type: "Schedule 40 PVC See Low Flow Purge Sheet for Details Total Well Depth (TD): Static Water Level (WL): 1913 -46.59 One Casing Volume(gal/L): --1015 Start Purge (hrs): 1017 End Purge (hrs): Total Purge Time (min):62 Total Vol. Purged (gal/L): 🞖 🦏 SAMPLE COLLECTION INFORMATION: Analysis Preservative **Container Requirements** Collected TCL VOCs HCI 3 40-mL clear glass vials **PCBs** 2 1-L ambler glass vials 105 Hexavalent Chromium 1 250-mL plastic bottle ΛO Total Metals (Total Cr and Fe) HNO3 1 500-mL plastic bottle yes Filtered Metals (Total Cr and Fe) ниоз 1 500-mL plastic bottle TOC H2SO4 3 40-mL amber glass vials OBSERVATIONS / NOTES: No stains or odors Pump set within screened intervals ~2 feet off bottom Hexavalent Chromium Test Kit Result: 0,00 ~ へんし Circle if Applicable: Signature(s): MS/MSD **Duplicate ID No.:** 



PROJECT	SITE NAME:
<b>PROJECT</b>	NUMBER:

NWIRP Bethpage Site 1 112G02230

WELL ID.:

BPS1-TT-MW304D 1-19-12

DATE:

Time	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	Comments
1015	46,59									
1020	46,66	600	2,44	0.137	1789	16.36	12.47	163	0,01	tan color (milky)
1025	46.66	600	7.74	0,125	812	11,41	13,20	103	0.01	tan color
1030	46,65	500	10.F	0/123	133	9,39	14.74	149	0.01	lan tint
1035	46,63	400	6.58	0.123	67.2	9.63	14.68	174	0.01	1. tint
1090	46,61	400	6.32	01133	43.2	۹,۶۱	14.36	191	0.01	alear Sgal
1045	46.60	400	6,13	0,123	33.5	9.31	14,24	197	0,01	clear
1050	46,60	400	5.97	0.123	30.1	9,17	14,14	197	0,01	clear
1055	46,60	400	5,90	0,124	23.4	8.29	13.59	192	0,01	clear
1100	46,60	400	5.84	0,123	27.7	8.06	14.44	191	0.0(	clear
105	46.60	400	5.85	0/123	13,9	807	14.11	187	0.01	Clear
1110	46.60	400	5.85	0,123	13,4	7,97	14.66	183	0,01	clear
1115	46,60	400	5.8 <u>5</u>	0.122	11,1	7.51	14.64	140	0,01	Clear
ルル	Collect some	<u>le</u>								
			**********							***************************************
	***************************************			***************************************						***************************************
										***************************************
									1**************************************	
								7770000000	***************************************	***************************************

SIGNATURE(S): Gallagett

PAGE OF



Page 1 of 1

Project Site Name: Project No.:	NWIRP Bett 112G02230	npage Site	1		Sample Lo	cation:	BPS1-17-M	17-MW3055-61172012 BPS1-TF-MW3055 3. Birke#	
[] Domestic Well Data [X] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	<b>1</b>		····	- No. of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control			ntration	<u>ce#</u>	
SAMPLING DATA:		jainin kulipa	ļari iķnāsiā i						
Date: 1-17-12	Color	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP	
Time: 1050	(Visual)·	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	(mV)	
Method: Low Flow - Grundfos	clear	5.74	0.0%	18.10	3.62	10.01	0,00	215	
PURGE DATA:				ęwia kinaliza la					
Date: 1-17-12	Volume	√ pH	s.c.	Temp.	Turbidity	DO	Salinity	ORP	
Method: Low Flow - Grundfos				***					
Monitor Reading (ppm):									
Well Casing Diameter & Material		i "			i i	***************************************			
Type: 2 " Schedule 40 PVC			See Low Fl	ow Purne Sh	neet for Details		L		
Total Well Depth (TD): 49.74	•	<u> </u>	1	ow range or	COLTOT DELANG	**			
Static Water Level (WL): 42.9							<del>                                     </del>		
One Casing Volume(gal/L):		-	<u> </u>						
							<u> </u>	<b>***</b>	
Start Purge (hrs):   000	•	<u> </u>	<u> </u>	····					
End Purge (hrs): 050									
Total Purge Time (min): 50	•							· vuvvaaa.	
Total Vol. Purged (gal/L): 3									
SAMPLE COLLECTION INFORMAT	ION:								
Analysis		Preser	vative		Container Re		3	Collected	
TCL VOCs	· · · · · ·	HCI		***************************************	-mL clear glass			yes	
PCBs Hexavalent Chromium				***************************************	L ambler glass v	· · · · · · · · · · · · · · · · · · ·		yo5	
Total Metals (Total Cr and I	=a\	HNO3		****	50-mL plastic bo 00-mL plastic bo			<u>/o</u>	
Filtered Metals (Total Cr and	-	HNO3			00-mL plastic bo			yes na	
TOC	<u> </u>	H2SQ4	<u></u> l		mL amber glass				
	•				me ambor grace	, ridio		<u> </u>	
							*****		
	•								
OBSERVATIONS / NOTES:									
No Shains, odors, o Pump set within screened intervals ~2 Hexavalent Chromium Test Kit Result	feet off botto	om .	) Teadir	<b>3</b> 5	,				
N	<u> </u>								
MS/MSD Duplicate ID No.:  BPSI- Do	,pOI-O	11720	1200	gi Hiki da ka	Signature(s):			•	



PROJECT SITE NAME: PROJECT NUMBER:

**NWIRP Bethpage Site 1** 

112G02230

WELL ID.: DATE:

BPS1-TT-MW3055 1-17-12

Time	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	m۷	% or ppt	
1000	5/291	_ جاء	+ pur	27						
1007	499.7	Purgerat	e fluntu	ating ic	anit get	to 5	apilize	(Shuts off	and speeds	up) troubleshoot
1020	42.99	500	5.79	0.098	26.1	10.67	18.41	186	0,00	tan colot (5gal) slight tan tint
1025	42,५१	500	5.76	0.097	21.3	b.45	18.34	195	0,00	slight tan tint
1030	42,99	500	5.77	0,096	11.7	10.24	18,25	201	<u> ೧</u>	clear
1035	42,99	500	5.72	0,096	123	10,32	18.08	204	0,00	cloge 9 and
1040	42.99	500	5.75	0.0%	4.32-	10.19	13.12	211	ల. <b>ం</b> ం	clear
1645	42,41	500	5.74	0.696	3.62	10.01	(8.10	215	0.00	13.599/
1050	Collect samp	le .								
		***************************************							**********	
				*******						
***************************************										
	***************************************									
		***************************************								
				· · · · · · · · · · · · · · · · · · ·						
	*********		***********		***************************************					
		***************************************								
									***************************************	
		***************************************			-		:			
								!		
				*****				***************************************		***************************************
							-		***************************************	
							************			

SIGNATURE(S): July Ball

PAGE OF



BFS1-TT-MW305\$ PROJECT SITE NAME: NWIRP Bethpage Site 1 WELL ID.: PROJECT NUMBER: 112G02230 DATE:

Time	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(ma/l \	(Celcius)	mV	% or ppt	Comments
1251	42.98		Theorem ( ) ( ) America	- (110x,011)	300m (11:17.00 ) 15500	(ing/L/	(Ocioida)	[ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [	- worhte	Use pump w/ eletrical tapeon
1255	43.05	900	5,86	0.103		12.84	17.11	132	0.00	tan color
1300	43.03	600	5.76	0.099	148	12.03	17.21	145	0,00	tantind
1305	43,00	450	5.78	0.093	111	1190	17.43	155	0,00	ton tint
1310	43,00	450	5.79	0.097	70.0	11.80	17.85	152	0.00	Slightlan tint 45 gal
1315	43.00	400	5.83	0.096	35.8	11.68	17.52	166	0.00	Clearish Clearish
1320	43,00	400	5.83	0.099	30.4	11.32	16.27	164	0.00	clear
1325	43.00	400	5.7°	8000	30.2	11.00	16.90	164	0	clear
1330			533	0099		1) 31	16.30	63	000	Pump rate Slowing Keep
1335			531	0,100		11.31	16.34	164	<u>ه</u> ن. ده	increasing control box HZ
		$\Box$	1	\ /		***************************************			~	ext 3000 Hz but not pumpin
		1 UMB	b DC	) Ko (i	vires	expo	sed Gro	und Faul	41	water made it through top
		4						0,000 ,(0)	<del>'                                    </del>	CONTRACTOR INCOME INCOME INCOME
			***************************************							
								***************************************		
							.,,,,,,,	~~~~		
			******							
			***************************************				-	******		
			-		***					- von
				*******		*****	***************************************	7		
			*******		*****					
							*******			
			*****	******		***************************************				
			***************************************	***************************************		***************************************				
							100000			
				******	******					
							*******			
				******			7.00.			

SIGNATURE(S): Dal Bald

PAGE OF



Page 1 of ( Project Site Name: NWIRP Bethpage Site 1 Sample ID No.: BPS1-TT-MW305T-01172012 Project No.: 112G02230 Sample Location: BPS1-77-MW 305I Sampled By: J. Birkell Domestic Well Data C.O.C. No.: [X] Monitoring Well Data Type of Sample: [] Other Well Type: [X] Low Concentration [] QA Sample Type: [] High Concentration SAMPLING DATA: 1-17-2012 Date: Color рΗ S.C. Temp. **Turbidity** DO Salinity ORP 1158 (Visual) (°C) (S.U.) (mS/cm) (NTU) (mg/l) (%) (mV) Method: Low Flow - Grundfos 0731 Clear 5.59 6,06 8,00 0.01 19,7 スパチ PURGE DATA: Date: 1-17-2012 Volume pΗ S.C. Temp. Turbidity DO Salinity ORP Method: Low Flow - Grundfos Monitor Reading (ppm): 💳 Well Casing Diameter & Material Type: 2" Schedule 40 PVC See Low Flow Purge Sheet for Details Total Well Depth (TD): Static Water Level (WL): 43.41 One Casing Volume(gal/L): --Start Purge (hrs): 103 End Purge (hrs): 1158 Total Purge Time (min): 55 Total Vol. Purged (gal/L): 🕻 🚓 SAMPLE COLLECTION INFORMATION: Analysis Preservative **Container Requirements** Collected TCL VOCs HCI 3 40-mL clear glass vials Ves **PCBs** 2 1-L ambler glass vials ¥05 Hexavalent Chromium 1 250-mL plastic bottle ro Total Metals (Total Cr and Fe) **HNO3** 1 500-mL plastic bottle ves Filtered Metals (Total Cr and Fe) ниоз 1 500-mL plastic bottle ΛO TOC H2SO4 3 40-mL amber glass vials OBSERVATIONS / NOTES: No Stains or odor) Pump set within screened intervals ~2 feet off bottom Hexavalent Chromium Test Kit Result: (), この Mall Circle if Applicable: Signature(s): And BahM MS/MSD Duplicate ID No.:



PROJECT SITE NAME: PROJECT NUMBER:

NWIRP Bethpage Site 1 112G02230

WELL ID.: DATE:

BPS1-TT-MW305I

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S:U:)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1103	43.41				7,000		, , , , , , , , , , , , , , , , , , , ,			clear
llog	43.42	800	5.82	0.233	Over Range	9.22	15,34	<b>33</b> 3	6.01	light brown ish orange
1113	43.42	800	6.04	0.252	e t 19	8.51	16.15	194	0.01	brown / orexay
1118	43.41	500	5.73	O.236	864	7.49	16.08	201	0.01	light brown tint
1123	43,41	456	568	0.235	35,	7.69	15.80	ा २७	0.01	tan tial
[128	43.42	450	5.61	0.234	103.6	7.90	15.88	208	0.01	tun tin
1133		400	5.63	0.233	654	7.71	16.09	201	0,01	clevish
1133	4342	400	5.60	0.333	45,4	7,84	16.24	ಇ೦೪	€ - 0!	Co. Sen. Jan.
1143	43,42	400	5 6	0.23	31.8	<b>37</b> 4	16.17	プログ	0,01	
1148	43,42	400	561	C 231	<b>25</b> 4	<b>8.0</b>	16.22	212	001	·
(153	43,42	400	5,59	0.231	192	ర్క్రిస్త్రి	16.06	3.17	601	1034
1152	Collect	Samp!	후							<b>\</b>
		*	y							
									***************************************	
		-								

SIGNATURE(S):

PAGE / OF



Page_ \ of _ \

Project Site Name: Project No.:	NWIRP Beth 112G02230	page Site 1	*****	****	Sample Lo	<u>0 01172012</u> <u>03050</u>		
<ul><li>[] Domestic Well Data</li><li>[X] Monitoring Well Data</li><li>[] Other Well Type:</li><li>[] QA Sample Type:</li></ul>	a 		·····	**************************************		.:		
SAMPLING DATA:								
Date: 1-17-11	Color	рН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1446	(Visual)	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	المعان	6,48	6148	13,42	33.4	5.73	0,0	179
PURGE DATA:								
Date: 1-17-(2	Volume	рН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material				***************************************				
Type: Z" Schedule 40 PVC			See Low Fl	ow Purge Sh	eet for Details		I.	
Total Well Depth (TD):		1		on raigo on	oct for Details			
Static Water Level (WL): 43.57			1					
One Casing Volume(gal/L):							-	
Start Purge (hrs): 1350							<del> </del>	
***************************************							-	
End Purge (hrs): 144								
Total Purge Time (min): 56								
Total Vol. Purged (gal/L): 6 🦡							<u>.</u>	
CAMBLE OOF FOTION MEODICA	TIONICATION	the section of the section of the	a at vice and the district for the fight	e de de de Nova, Professional de divisione d	作品 医电影大学 经抵押金 经金额 医电影 电流电流电流 电流电池	化热性性 医皮肤 化二甲基磺胺二甲二甲磺胺	"更快点,就没有什么,你你没好这样,你就没有这么	
SAMPLE COLLECTION INFORMA	TION:							
Analysis	TION:	Preser	vative	2.40	Container Re	<u> </u>		Collected
Analysis TCL VOCs	TION:	Preserv HCI	vative		mL clear glass	vials		yes
Analysis TCL VOCs PCBs	TION:	HCI	vative	2 1-L	mL clear glass . ambler glass	vials vials		yes yes
Analysis TCL VOCs PCBs Hexavalent Chromium	***************************************	HCI	vative	2 1-L 1 25	mL clear glass . ambler glass 0-mL plastic b	vials vials ottle		yes yes yes
Analysis TCL VOCs PCBs	Fe)	HCI  	vative	2 1-L 1 25 1 50	mL clear glass . ambler glass	vials vials ottle		yes yes yes yes
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and	Fe)	HCI   HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and	Fe)	HCI   HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and	Fe)	HCI   HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and	Fe)	HCI   HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and	Fe)	HCI   HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and	Fe)	HCI   HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and TOC	Fe)	HCI   HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and TOC	Fe)	HCI   HNO3 HNO3	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and TOC	Fe) d Fe)	HCI   HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis  TCL VOCs  PCBs  Hexavalent Chromium  Total Metals (Total Cr and Filtered Metals (Total Cr and TOC  TOC	Fe) d Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis  TCL VOCs  PCBs  Hexavalent Chromium  Total Metals (Total Cr and Filtered Metals (Total Cr and TOC  TOC	Fe) d Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and TOC	Fe) d Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis  TCL VOCs  PCBs  Hexavalent Chromium  Total Metals (Total Cr and Filtered Metals (Total Cr and TOC  TOC	Fe) d Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis  TCL VOCs  PCBs  Hexavalent Chromium  Total Metals (Total Cr and Filtered Metals (Total Cr and TOC  TOC	Fe) d Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials ottle ottle ottle		yes yes yes yes No
Analysis  TCL VOCs  PCBs  Hexavalent Chromium  Total Metals (Total Cr and Filtered Metals (Total Cr and TOC  TOC	Fe) d Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass . ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b	vials vials vials ottle ottle ottle s vials		yes yes yes yes No
Analysis TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and TOC   OBSERVATIONS / NOTES:  We stark or allow Pump set within screened intervals ~ Hexavalent Chromium Test Kit Resul	Fe) d Fe)	HCI HNO3 HNO3 H2SO4	vative	2 1-L 1 25 1 50 1 50	mL clear glass ambler glass 0-mL plastic b 0-mL plastic b 0-mL plastic b nL amber glass	s vials vials vials ottle ottle s vials		yes yes yes yes No



PROJECT SITE NAME: PROJECT NUMBER:

**NWIRP Bethpage Site 1** 

112G02230

WELL ID.: DATE:

BPSI-TT-MW305D

1-17-12

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
1350	43.57	*(11(F)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	m۷	% or ppt	
1354	43.81	800	6.36	A 150			# # # # # # # # # # # # # # # # # # #			
1359	43.65	450	6.65	0,159	1/112	7.53	14.01	.988	0	Clear
1404	43.62	400	6,67	0.160	1415	630	14.20	257	0.0	tan coler
1407	43.62	350	6.52		3 <u>89</u> 255	6.63	14.40	176	0.0	tan tint
1414	43,62	350	6.56	0,154	150	6.52	14,29	173	0,0	toutint
149	43.62	350	6,55	0.152	43.2	6.56	13,55 13,28	173	<u>0</u> ,0	to tut
1424	43.62	356	6,53	0,152	*****	6,53		176	0.0	slight tout int 3 gal
1429	43.62	350	<u>6.52</u>	0,150	74.6	5.37	13,45	177	<u> </u>	(2001) 1 30
1434	43.62	350	6.49	0.149	47.3	5.8i	13.33 13.25	178	ථ,ර	clear
1439	43.62	350	6.48	0.149	হান্ত	5.69	13.39	178 179	<u>ල ල</u>	Clear
1444	43.62	350	6,48	0,148	33.4	5.73	13.42	179	٥,٥	clear 5 gal
1446		mole	9,70	-,,,,	324	3/13	154~	1 7-1	<u> </u>	clear y
		2000	*****		*******					
	····						71			
	*****					·····	"	*****		
		***						·*···		
		1111.		·····				******		
	***************************************									· · · · · · · · · · · · · · · · · · ·
			A111.		****		- 1111			
			*****					7**************************************		
						*****				***************************************
		· · · · · · · · · · · · · · · · · · ·			7700					
		***					-			
		· · · · · · · · · · · · · · · · · · ·					·······			
	******									
						<u> </u>				
							<u></u>			

SIGNATURE(S):

PAGE__OF__



Page_*i*_ of _*i*__

Project Site Name: Project No.:	NWIRP Beti 112G02230	page Site 1		<u> </u>	_Sample Lo Sampled E	BPS1-77-MV	\$-01232012 N3064	
[] Domestic Well Data [X] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	:a 					C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration		
SAMPLING DATA:	skilu nishi							
Date: 1-23-/2	Color	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1350	(Visual)	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	Clear	5.97	0.077	16.91	6,0	8.15	<del></del>	266
PURGE DATA:		1						
Date: 1-23-/2	Volume	рH	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos		.	<u> </u>					
Monitor Reading (ppm): り.ひ								<u> </u>
Well Casing Diameter & Material								
Type: 2 " Schedule 40 PVC								I
Total Well Depth (TD): 60'		T						
Static Water Level (WL): 44.96	1			*********				
One Casing Volume(gal/L):		-		<u>.                                    </u>				
Start Purge (hrs): 1250	†	1			<del>                                     </del>			
End Purge (hrs): 1350				VAV				
Total Purge Time (min): 60	<del>                                     </del>	-			<del>                                     </del>			
Total Vol. Purged (galit): 7.0		<del>                                     </del>		vantanas				
SAMPLE COLLECTION INFORMA	TION:	economic de la constanta de la constanta de la constanta de la constanta de la constanta de la constanta de la	l Constraintent	arka sangiya bilarisi		i leishijakataa);	ana e e e e e e e e e e e e e e e e e e	PARTER REPRESENTATION OF THE
	(HIW) The payment	Preserv	vative	nga kanakana ay	Container Re	quirements	<u> Migliodonii parm</u>	Collected
Analysis	Analysis				***************************************			
Analysis TCL VOCs		HCI		3 40-	mil ciear diass	VIAIS		I <del>-</del> 5
		-	<u> </u>		mL clear glass			3 2
TCL VOCs		НСІ		2 1-l	L ambler glass  50-mL plastic be	vials		3   2   1
TCL VOCs PCBs		HCI 		2 1-l 1 25	_ ambler glass	vials ottle		
TCL VOCs PCBs Hexavalent Chromium	l Fe)	HCI  		2 1-l 1 25 1 50	L ambler glass 50-mL plastic bo	vials ottle ottle	**************************************	<i>Z</i>
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and	l Fe)	HCI   HNO3		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic bo 00-mL plastic bo	vials ottle ottle		Z 1 1
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and	l Fe)	HCI   HNO3 HNO3		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and	l Fe)	HCI   HNO3 HNO3		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and	l Fe)	HCI   HNO3 HNO3		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and	l Fe)	HCI   HNO3 HNO3	Mary and the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same	2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and	l Fe)	HCI   HNO3 HNO3		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and	l Fe)	HCI   HNO3 HNO3		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and TOC	l Fe)	HCI   HNO3 HNO3		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr ar TOC  OBSERVATIONS / NOTES:	I Fe) d Fe)	HCI   HNO3 HNO3 H2SO4		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr ar TOC  OBSERVATIONS / NOTES:	I Fe) d Fe)	HCI   HNO3 HNO3 H2SO4		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr ar TOC  OBSERVATIONS / NOTES:	I Fe) d Fe)	HCI   HNO3 HNO3 H2SO4		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr ar TOC  OBSERVATIONS / NOTES:	I Fe) d Fe)	HCI   HNO3 HNO3 H2SO4		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic b 00-mL plastic b 00-mL plastic b	vials ottle ottle		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and TOC  OBSERVATIONS / NOTES:  Pump set within screened intervals Hexavalent Chromium Test Kit Resu	I Fe) d Fe)	HCI   HNO3 HNO3 H2SO4		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic be 50-mL plastic be 50-mL plastic be 50-mL plastic be mL amber glass	vials ottle ottle s vials		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr ar TOC  OBSERVATIONS / NOTES:  Pump set within screened intervals Hexavalent Chromium Test Kit Resu	1 Fe) d Fe) 2 feet off botto lt: 0.0/A	HCI   HNO3 HNO3 H2SO4		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic be 50-mL plastic be 50-mL plastic be 50-mL plastic be mL amber glass	vials ottle ottle sivals		7 -
TCL VOCs PCBs Hexavalent Chromium Total Metals (Total Cr and Filtered Metals (Total Cr and TOC  OBSERVATIONS / NOTES:  Pump set within screened intervals Hexavalent Chromium Test Kit Resu	1 Fe) d Fe) 2 feet off botto lt: 0.0/A	HCI   HNO3 HNO3 H2SO4		2 1-l 1 25 1 50 1 50	L ambler glass 50-mL plastic be 50-mL plastic be 50-mL plastic be 50-mL plastic be mL amber glass	vials ottle ottle s vials		7 -



PROJECT SITE NAME: NWIRP Bethpage Site 1 WELL ID.: BPSI-TT-MW306\$
PROJECT NUMBER: 112G02230 DATE: 1-23-12

<b>T</b> :	Water Lavel	- Fland	, LI	C Cond	Turb.	DO	Томи	ORP	Colinity	
Time	Water Level	Flow	pН	S. Cond.	i urb.	טט	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
1245	44.96				***					In, tial
1250	44.98	425	5,77	0.082	613	9.47	15.80	231	**************************************	Lloudy (Brown)
1255	44.98	400	5.90	0.080	566	9.01	16.30	236	- SPAN	11 11
1300	44.98	400	5.94	0.078	430	8.72	16.41	249	-	11 11
1305	44.97	400	6.00	0.078	199	8.27	16.40	251	·=	11 11
1310	44.97	400	5.99	0.078	1/3	8.22	16.59	252	toolija.	Tinted (Ten)
1315	44.97	400	5.97	0.078	92.5	8.16	16.32	250	-	72 12
1320	44.97	400	5.96	6.078	59.2	8.24	16.88	254		Slight Tint (Ten)
1325	44.97	400	5.98	0.077	37.8	8.28	16.91	256	~ <del>~</del>	11 11 11
1330	44.98	400	5.98	0.077	28.3	8.20	16.91	259	-	11 11 11 11
i 3 35	44,98	400	5.98	0.077	15.6	8.21	16.93	261	he <u>m</u>	clear
1340	44,98	400	5.98	0.077	8.9	8.17	16.93	263		clear
1345	44.98	400	5.97	0.077	7.4	8.13	16.89	264	***	clear
1350	44.98	400	5.97	0.677	6.0	8.15	16.91	266	-	clear-callect sample
	<u> </u>									

SIGNATURE(S):

PAGE_/OF_/



Page<u>1</u> of <u>1</u>

Project Site Name: Project No.:	NWIRP Betl 112G02230	npage Site	1		Sample IE Sample Lo Sampled I	1-TT-MW306 BPS1-TT-MV _VAS	<u> </u>	
<ul><li>[] Domestic Well Data</li><li>[X] Monitoring Well Dat</li><li>[] Other Well Type:</li><li>[] QA Sample Type:</li></ul>	a			170	C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration			V forest
SAMPLING DATA:		unichthy.			de elektrika bilan	anabar (AU.)	illisikili kalinga	rnrhetti itilikki
Date: /- 23 -/2_	Color	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1210	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	cker	5.70	0.120	16.33	0.1	7.00		269
PURGE DATA:								
Date: 1-23-12	Volume	рH	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos					****	****		
Monitor Reading (ppm): D.D								
Well Casing Diameter & Material		<del></del>		······				
_		I	Cool ou "	Janua Durene O'	o ad fact D = ' = ''	1,00 7.0	<u></u>	
Type: 2 " Schedule 40 PVC			See LOW F	iow Purge Sh	eet for Details	:		
Total Well Depth (TD): 199		<u> </u>		***************************************				
Static Water Level (WL): 45.34		<u> </u>						
One Casing Volume(gal/L):								
Start Purge (hrs): ///D								-
End Purge (hrs): 1210								
Total Purge Time (min): 60								
Total Vol. Purged (galle): 7-0		<u> </u>	·}				···	
SAMPLE COLLECTION INFORMA	TION:				lon loitieYushaar		Palistoteressasisis	
Analysis		Preser	vative		Container Re	auirements	2010/01/05   100/01/09/09/09	Collected
TCL VOCs		нсі		3 40-	mL clear glass			7
PCBs		ļ	**		_ ambler glass			6
Hexavalent Chromium					0-mL plastic b			1
Total Metals (Total Cr and	Fe)	ниоз		1 50	00-mL plastic b	ottle		ı
Filtered Metals (Total Cr and	d Fe)	НИОЗ		1 50	0-mL plastic b	ottle		
тос		H2SO4		3 40-r	nL amber glas	s vials		3
*****				*********				
		ļ						
								*****
	<del></del>	<u> </u>					·v	
		<u> </u>			····			***
		l						
OBSERVATIONS INOTES	ver e sperios periodorio			Signer Fig. 5 of the Fig. 1.	. S. Australia de Caramana	outs to New Service in the		and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s
OBSERVATIONS / NOTES:							yashing) an	
Pump set within screened intervals ~:	2 feet off botto	 		even ubos	Jesepsi sanc			allawawa haziling
OBSERVATIONS / NOTES:  Pump set within screened intervals ~?  Hexavalent Chromium Test Kit Result  No Stains or odors	2 feet off botto t: 0.00 S abset	om Mg/						Allawawa i dadi jirga
Pump set within screened intervals ~:	2 feet off botto t: 0.00 S abser	m Mg/			Signature(s)			



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BFSI-MW306I
PROJECT NUMBER:	112G02230	DATE:	1-23-12

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH (S.U.)	S. Cond.	Turb. (NTU)	DO (mg/L)	Temp.	ORP mV	Salinity % or ppt	Comments
1105	45.34						****			Initial
1110	45.36	425	5.86	0.107	204	7.79	15.16	290	4	«Body (Brown)
1115	45.36	400	5.90	0.131	307	6.55	15.80	218		11 17
1120	45.37	400	5.83	0.127	79.7	6.64	15.95	236		Slight Tint (Tan)
1125	45.37	400	5.78	0.123	30.9	6.80	16.04	247	-	11 11 11
1130	45.37	400	5.74	0.122	18.6	6.85	16.15	251		clear
1135	45.36	400	5.72	0.121	7.5	6,43	16.18	255		clear
1140	45.37	400	5.72	0.120	4.8	6.95	16.21	258	_	de
1145	45.37	400	5.71	0.119	2.7	6.87	16,23	261	<del>-</del>	clear
1150	45.36	400	5.70	0119	2.3	6.92	16.28	263	4.000	cleer
1155	45.36	400	5.71	6.120	1.6	6.95	16.29	263	OE ³	cleer
1200	45.36	400	5.69	0.120	0.5	7.01	16.31	267		cks
1205	45.36	400	5.70	0.119	0.2	6.98	16.36	268	***	cker
1210	45.36	400	5.70	0.120	0.1	700	16.38	269	<del>-</del>	cless - what sample
										/
		<u> </u>								
		-								

SIGNATURE(S): COLAR



Page_/ of /

Project Site Name: NWIRP Bethpage Site 1 Sample ID No.: BPS1-77 -MW. 26 6.0 - 21232012 Project No.: 112G02230 Sample Location: BPS1-77-MW.306.0 Sampled By: VAS [] Domestic Well Data C.O.C. No.: [X] Monitoring Well Data Type of Sample: [] Other Well Type: [X] Low Concentration [] QA Sample Type: [] High Concentration SAMPLING DATA: Date: 1-23-12 Color S.C. pН Turbidity Temp. DO Salinity ORP Time: 1035 (Visual) (S.U.)  $(^{0}C)$ (mS/cm) (NTU) (mg/l) (%) (mV) Method: Low Flow - Grundfos Clear 6.0E 0.114 15.60 0.0 7.01 231 PURGE DATA: Date: 1-23-12 Volume На S.C. Temp. Salinity Turbidity DO ORP Method: Low Flow - Grundfos Monitor Reading (ppm): 0.0 Well Casing Diameter & Material Type: 🙎 " Schedule 40 PVC See Low Flow Purge Sheet for Details Total Well Depth (TD): 294 Static Water Level (WL): 45.95 One Casing Volume(gal/L): --Start Purge (hrs): 0935 End Purge (hrs): 103.5 Total Purge Time (min): 60 Total Vol. Purged (gal/L): 6.5 SAMPLE COLLECTION INFORMATION: **Analysis** Preservative **Container Requirements** Collected TCL VOCs HCI 3 40-mL clear glass vials 3 **PCBs** 2 1-L ambler glass vials 2 Hexavalent Chromium 1 250-mL plastic bottle Total Metals (Total Cr and Fe) ниоз 1 500-mL plastic bottle í Filtered Metals (Total Cr and Fe) HNO3 1 500-mL plastic bottle -TOC H2SO4 3 40-mL amber glass vials OBSERVATIONS / NOTES: Pump set within screened intervals ~2 feet off bottom Hexavalent Chromium Test Kit Result: 0.01 149/L No stains or adors observed Circle if Applicable: Signature(s): MS/MSD **Duplicate ID No.:** USFAR



PROJECT SITE NAME: NWIRP Bethpage Site 1 WELL ID.: BPS/-TT-MW306J)
PROJECT NUMBER: 112G02230 DATE: /- 23-/2

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH (S.U.)	S. Cond.	Turb. (NTU)	DO (mg/L)	Temp.	ORP mV	Salinity % or ppt	Comments
0925	45.95		_	_	-		<u></u>		<del></del>	Initial
0935	45.97	400	6.02	0.136	144	8.32	15.02	235	Simo	Tinted (Brown)
0940	45.97	400	6.12	0.133	209	7.63	15.08	209		31 11
0945	45.97	400	6.15	0./25	150	7.30	15.15	192	هين	26 4
0950	45.97	400	6.15	0.121	76.4	7.05	15.21	201	حم,	slight Tint CTEA)
0955	45.97	400	6.12	0.118	30.3	7.10	15.27	207	-	10 18 11
1000	45.47	400	6.09	0.117	18.1	6.98	15.35	213	920	c/eas-
1005	45.97	400	6.06	0.116	6.6	7.02	15.41	219	-	cless
1010	45.97	400	6.02	0.115	2.4	7.00	15.50	223	¥22-	clear
1015	45.97	400	604	0.115	6.9	6.96	15.54	224		dear-
1020	45.97	400	6.05	0.115	0.4	7.01	15.60	226		dear
1025	45.77	400	6:05	0.114	0.1	7.02	15.EI	229	<b>**</b>	elear
1030	45.97	400	6.05	0.114	0.0	7.00	15.63	230		Clear
1035	45.97	400	6.06	0.114	0.0	201	15.60	231		cheer-culled single
				•						
:										
	****									
	***************************************			****						
					~~~~					
			•							

SIGNATURE(S):



Page_ of Project Site Name: NWIRP Bethpage Site 1 Sample ID No.: BPS1-TT-MW3075-0118 2012 Project No.: 112G02230 Sample Location: BPS1-TT-MW367S Sampled By: [] Domestic Well Data C.O.C. No.: [X] Monitoring Well Data Type of Sample: [] Other Well Type: [X] Low Concentration [] QA Sample Type: [] High Concentration SAMPLING DATA: Date: 1-13-2012 Color S.C. рΗ Temp. Turbidity DO Salinity ORP Time: 1450 (Visual) (°C) (S.U.) (mS/cm) (NTU) (mg/I)(%) (mV) Method: Low Flow - Grundfos clear 644 0.183 1757 9.55 Z/30 0,01 164 PURGE DATA: Date: 1-18-12 Volume Hq S.C. Temp. **Turbidity** DO Salinity ORP Method: Low Flow - Grundfos Monitor Reading (ppm): Well Casing Diameter & Material Type: 🔍 " Schedule 40 PVC See Low Flow Purge Sheet for Details Total Well Depth (TD): Static Water Level (WL): リロラる One Casing Volume(gal/L): --Start Purge (hrs): 1333 1450 End Purge (hrs): Total Purge Time (min): 87Total Vol. Purged (gal/L): 13 aal SAMPLE COLLECTION INFORMATION: **Analysis** Preservative **Container Requirements** Collected TCL VOCs HCI 3 40-mL clear glass vials **PCBs** 2 1-L ambler glass vials Hexavalent Chromium 1 250-mL plastic bottle <u>no</u> Total Metals (Total Cr and Fe) HNO3 1 500-mL plastic bottle yes Filtered Metals (Total Cr and Fe) HNO3 1 500-mL plastic bottle 10 TOC H2SO4 3 40-mL amber glass vials $\Delta \alpha$ OBSERVATIONS / NOTES: No Stains oredors Pump set within screened intervals ~2 feet off bottom Hexavalent Chromium Test Kit Result: つんのぬんし Circle if Applicable: Signature(s): Jul Balit MS/MSD **Duplicate ID No.:**



PROJECT	SITE NAME:
PROJECT	NUMBER:

NWIRP Bethpage Site 1

112G02230

WELL ID.:

BPS1-TT-MW3075 1-18-12

DATE:

Time	Water Level	Flow	рН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	m۷	% or ppt	Comments
1328	41.73									
1330	41.78	8 <i>0</i> 0	5.96	0,142	Over Range	11.94	1560	153	6.01	Red /brown water
1335	41,73	500	<u>უ</u> ფ	0.176	1136	6.75	16.56	122	0,01	Red color
1340	41.73	450	6.36	0.179	287	6.09	17,44	113	0.01	Red tint
1345	41.73	4 6 0	6.40	0.182	183	5,50	17.69	122	0.0	Red tint
1350	41.73	400	6.38	0.121	125	5,45	16,71	119	0.00	Red tint
1355	41.73	400	6.41	0.179	91,6	549	18.40	123	001	tan lint
1400	41.73	400	6,41	0.122	55.4	5.43	18.46	120	0	clear soal
1405	41.73	350	6.43	0.186	51.9	6,03	17.73	128	0.01	claw pumpslowed
1410	41.73	_35△	6.43	0.127	132	७:५५	12.02	103	0.01	Sacraco Ho
1423	41,75	600	6.36	0.190	327	9,42	17.35	128	001	prop pump surged
1428	41.75	600	6.38	0.185	125	9.31	17.37	152	201	shotdown Red tint
1433	41.74	506	6,44	0.187	596	₹ <i>3</i> 3	17.46	152	001	clearish 10 gal
1438	41.73	450	6,44	0427	30,9	8.60	17.46	152	0.01	clear
i 443	41.73	400	6,44	० ५४३	15, 2	₹,34	17.54	163	001	Clear
1442	41.73	400	6.44	0,123	9,55	Z 30	17.57	164	0.01	elan 13 gc/
1450	Collect Sam	ple							***************************************	7,
V-1.11									******	***************************************

					71111111			WII.1.	***************************************	
								·····		
							**			this.
				-	· · · · · · · · · · · · · · · · · · ·		***************************************			
			,			·				
			********		1.00					
			***************************************					***		
			1			*****				
									I	

SIGNATURE(S)

Jul Biff

PAGE__OF__



Page<u>i</u> of <u>l</u>

Project Site Name: Project No.:	NWIRP Bet 112G02230	-	1		Sample Lo	cation:	BPS1- TTM	
[] Domostis Mi-II D.					Sampled E	•	1. Birk	e ft
[] Domestic Well Date					C.O.C. No			
[X] Monitoring Well E [] Other Well Type:	Jata				Type of Sa		44!	
[] QA Sample Type:	*****					w Concen า Concent		
ti arroampio rypo.				wassin.	_ [] [][][][Concent	ration	
SAMPLING DATA:	((estichile) jeritt							
Date: 1-18-17-	Color	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1232-	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	577	0.186	13,96	15.3-	365	01	166
PURGE DATA:								
Date: 1-18-12	Volume	pН	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos					-			
Monitor Reading (ppm):			<u> </u>				- -	
Well Casing Diameter & Material			***************************************	·····		****		
Type: 2" Schedule 40 PVC				I D Ot			<u> </u>	
Total Well Depth (TD): 198		T	See Low F	low Purge Sn	eet for Details		Τ''''	<u> </u>
		1	<u> </u>			*****		
Static Water Level (WL): 석기년		 	-				<u> </u>	
One Casing Volume(gal/L):								
Start Purge (hrs): 126								
End Purge (hrs): 123ユ							.,,,,,	
Total Purge Time (min): 66								
Total Vol. Purged (gal/L): 名5g	.1							******
SAMPLE COLLECTION INFORM	MATION:							
Analysis		Preser	vative		Container Re	quirements		Collected
TCL VOCs		HCI		3 40-	mL clear glass			Ves 3
PCBs		<u> </u>		2 1-1	ambler glass	vials		yes 2
Hexavalent Chromit				1 25	0-mL plastic be	ottle		yes 1
Total Metals (Total Cr a		НИОЗ		1 50	00-mL plastic be	ottle		yes 1
Filtered Metals (Total Cr	and Fe)	HNO3			00-mL plastic bo	*****		10
TOC		H2SO4		3 40-r	nL amber glass	vials		Λο
	*********						<u>, , , , , , , , , , , , , , , , , , , </u>	
		 	-		****			
· · · · · · · · · · · · · · · · · · ·		1				****		-1500011
		-						

OBSERVATIONS / NOTES:				roceanterva:		Hereid Waret		rosani va sastrasi nista. II.
No Stains or Pump set within screened intervals	م کرہ s ~2 feet off botto	om.						
Hexavalent Chromium Test Kit Re								
	pi 0.00							
, -	1	,						
Circle if Applicable:					A			
				ALTERNATION OF THE PARTY OF THE	Signature(s):			1
MS/MSD Duplicate ID No	0.:				Charles Safety			
						-la Cf		



PROJECT SITE NAME: PROJECT NUMBER:

NWIRP Bethpage Site 1

112G02230

WELL ID.:

BPSI-TT-MW307 I

DATE: |-18-12

	l									
Time	Water Level	Flow	pН	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	oo.m.nom.o
1126	42.14									clear
1130	42.30	600	5,85	0.198	2139	9.97	14,21	149	0,0	tan color
1135	42.32	500	5.85	0.197	1008	307	13.97	136	0.0	tan tint/color
1140	42.32	500	5,82	0,196	346	2.16	14.07	138	0.01	tan color
1145	42,30	450	5.82	0.194	167	2.33	14.34	142	0.01	ton tint
1150	42.30	450	5.81	0.192	યુપ, છ	วฺภฺๆ	14. 28	150	0.01	to a tint , ,
1155	42.30	450	5. <u>%</u> O	0.192	603	2.87	14.14	153	0.01	ten tint (6991)
1200	42.30	450	5:79	0.150	38.J	3.00	14,23	155	0.0	cleer
1205	42.30	4 8 0	5.79	0,190	_30,9	3, <i>0</i> 5	14.15	156	0.01	Clerav
1310	42.30	400	5.79	0.189	24,9	3.54	13.89	159	0.01	Clear
1215	42,30	400	5.77	0.137	22.8	3.82	13.77	161	0	Clear
1220	42.30	400	5,78	0.186	17.3	3.59	13.25	162	٥ آن	Clear
1225	42.30	S C L	5.77	0.186	16.5	3.76	13.26	164	0	clear ,
1330	42.30	400	5.77	C .126	12.2	3.65	J3.16	166	O	clear (8.5 gal)
1232	Collect samp	<u>le</u>							,	

			*****		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
					···					

SIGNATURE(S): __

Jul Bild

PAGE OF



Page_\ of _\

Project Site Name: NWIRP Bethpage Site 1 Sample ID No.: BPS1-T T-MW3671-01182612 Project No.: 112G02230 Sample Location: BPS1-TT-MW307D Sampled By: 1. Birkett [] Domestic Well Data C.O.C. No.: [X] Monitoring Well Data Type of Sample: [] Other Well Type: [X] Low Concentration [] QA Sample Type: [] High Concentration SAMPLING DATA: Date: 1-18-12 Color S.C. рΗ Temp. **Turbidity** DO Salinity ORP Time: 1042 (Visual) (S.U.) (mS/cm) (°C) (NTU) (mg/l) (%) (mV) Method: Low Flow - Grundfos clear 6,56 0,293 431 13.94 10.44 0,01 06 PURGE DATA: Date: 1-18-12-Volume Нα S.C. Temp. **Turbidity** DO Salinity ORP Method: Low Flow - Grundfos Monitor Reading (ppm): Well Casing Diameter & Material Type: 👤 " Schedule 40 PVC See Low Flow Purge Sheet for Details Total Well Depth (TD): 236 Static Water Level (WL): 42.62 One Casing Volume(gal/L): --Start Purge (hrs): 0940 1042 End Purge (hrs): Total Purge Time (min): 62 Total Vol. Purged (gal/L): 🐉 🚓 시 SAMPLE COLLECTION INFORMATION: Analysis Preservative **Container Requirements** Collected TCL VOCs HCI 3 40-mL clear glass vials **PCBs** 2 1-L ambler glass vials V#5 Hexavalent Chromium 1 250-mL plastic bottle Na Total Metals (Total Cr and Fe) HNO3 1 500-mL plastic bottle Ves Filtered Metals (Total Cr and Fe) HNO3 1 500-mL plastic bottle 10 TOC H2SO4 3 40-mL amber glass vials Λ۵ OBSERVATIONS / NOTES: No stains or odors Pump set within screened intervals ~2 feet off bottom Circle if Applicable: Signature(s): And Bald MS/MSD **Duplicate ID No.:**



307D

PROJECT	SITE NAME:
PROJECT	NUMBER:

NWIRP Bethpage Site 1 112G02230

WELL ID.: DATE:

BPS1-TT-MW307D

Time	Water Level	Flow	pH	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)		(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
0940	42.62									
0945	42.67	425	5.85	3.227	8,35	7,09	12.79	239	0.01	clar
0956	42.67	425	6.25	0.211	48.6	5.73	13.09	ルチ	0.01	clear
o 955	42.67	425	6.35	0,206	62,3	5.14	12.90	92	0.0(tan tint
1000	42.67	425	6,41	6,203	43,3	4,47	13,34	87	0.01	clear
1005	42.67	425	6.45	C . 203		4.99	13,60	පිපි	J0.0	clear
1010	42.67	425	6,48	$O, \Im O3$	31.6	4,36	13.39	90	0.0	clear
1015	42.67	425	6.51	0.303	35, 2€	4.36	13.83	96	0	clear 5 agl
1020	42.67	425	6,52	० २०३	17.6	4.54	13.56	97	0 ()	Clear 5 gal
1025	42,67	425	6.53	০, ২০3	14.7	4.35	13.70	102	0,01	clear
1030	42.67	425	6.53	6,202	16,0	4.67	13.39	105	0.01	clear
1035	42.67	425	<u>د.55</u>	೦,೩೦૩	11.5	4.41	13.72	106	0.0	Clear
1040	42.67	425	6.56	C-203	0,44	4.31	13/14	106	ଚ.୦ [Clear Sgal
1042	Collect Son	بهاد								3
							**	*****		

					****			········	······	

*******					*********					
		· · · · · · · · · · · · · · · · · · ·							·····	
	· · · · · · · · · · · · · · · · · · ·									
							*****	***************************************		
	***************************************	*******								· 1000000000000000000000000000000000000
				·						
			- ///							

SIGNATURE(S):

PAGE OF /



Page_*L*_ of <u>_</u>__

Project Site Name: Project No.: [] Domestic Well Data [X] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	NWIRP Bett 112G02230	npage Site	1		Sample Lo Sampled E C.O.C. No Type of Sa [X] Lo	ocation: 3y: :		
SAMPLING DATA:		arai leadara	ri is kich biblini		TOTAL BUSINESS SINS	Color I de la Borna de la Color de la Colo		
Date: 1-16-12	Color	рН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1605	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	Clear	6.16	Ď. 283	13.85	4.9	9.67	(/e/	244
PURGE DATA:								
Date: 1-16-12	Volume	рĦ	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos				· ·				<u> </u>
Monitor Reading (ppm): D · O		<u> </u>	1			•		
Well Casing Diameter & Material		 			-			
-		I					<u>l</u>	
Type: 2 " Schedule 40 PVC		Ι	See Low F	low Purge Sh	eet for Details	•		
Total Well Depth (TD): 64								
Static Water Level (WL): 55,24								
One Casing Volume(gal/L):								
Start Purge (hrs): 1510			ļ	·····				***************************************
End Purge (hrs): 1605								
Total Purge Time (min): 55								
Total Vol. Purged (gal)L): 6.5								
SAMPLE COLLECTION INFORMAT	ION:							
Analysis		Preser	vative		Container Re	equirements		Collected
TCL VOCs		HCI	-	3 40-	mL clear glass	vials		7
PCBs				2 1-1	L ambler glass	vials		6
Hexavalent Chromium				1 25	50-mL plastic b	ottle		
Total Metals (Total Cr and		HNO3		******	00-mL plastic b			3
Filtered Metals (Total Cr and	Fe)	HNO3		***************************************	00-mL plastic b			- -
TOC		H2SO4		3 40-r	mL amber glas	s vials		_
**************************************				****			'	
	***************************************				******	·		

		<u> </u>						~~~~~~~
OBSERVATIONS / NOTES:		sekişi jura					hithe prince	
Pump set within screened intervals ~2 Hexavalent Chromium Test Kit Result		_	_					
Circle if Applicable:					Signature(s)	•		
MS/MSD Duplicate ID No.:						PAL	2	



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPS1-TT- MW308\$
PROJECT NUMBER:	112G02230	DATE:	1-16-12

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH (S:U:)	S. Cond. (mS/cm)		DO /mg// \	Temp.	ORP mV	Salinity % or ppt	Comments
1500	55.24		-		-	- (mg/L/s	*(Octorus)	assesses to a Variable	~	Initial
1510	55.25	400	6.12	0.292	747	11.20	12.49	237	*	cloudy (Brown)
1515	55:25	400	6.12	6.291	194	11.04	12.95	237		ii (Brass)
1520	55.25	400		0.294	65.8	10.73	13.40	238	_	Slight Tint (Ten)
1525	55.25	400		0.295	32.9	10.41	13.86	239	-	3/19hF 1121 (192)
15.30	55.25	400		6.290	24.0	10.36	13.84	2.38	 ,	" "
1535	55.25	400		o 238	17.3	10.32	13.88	237		clear
1540	55.25	400		0.287	11.6	10.27	13,82	239		alest
1545	55.25	400	6.16	0.286	8.45	10.26	13.78	241		clear
1550	55.25	400	6.16	0.283	7.0	9.99	13.85	241	**	clear
1555	55,25	400		6.284	6.4	9.50	13.84	242	-	clear
1600	55.25	400		0.283	5.8	9.69	13.87	243		clear
1605	55.25	400	6.16	6.283	4.9	9.67	13.85	244	-	clear-collect sandle
							10.9			Crear - Coned Sentire
			****		***************************************		· · · · · · · · · · · · · · · · · · ·			
İ					******					WIRELES.
	***************************************			7.1.1.1.1.1						
			*********		,					

	***************************************		William Control		***************************************			****		
				7"1"11111			**********			
				***	**			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
			***************************************	***************************************	***					···
									1771WMM1	West Market
					***************************************			· · · · · · · · · · · · · · · · · · ·		
				İ	***************************************					

SIGNATURE(S):	lnAAL



Page / of /

Project Site Project No.:		NWIRP Bett 112G02230	page Site	1		Sample Lo	BPS1-TT-MV WAS	-01/62012 N308I	
[X] Monit [] Other V	atic Well Data coring Well Data Well Type: mple Type:	a 				Sampled B C.O.C. No. Type of Sa [X] Lov [] High			
SAMPLING DAT.	A:	Y MARON CAR				With the second	9084910644191.		indu Çoğaylar hiline
Date: 1-16-	12_	Color	рН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Time: 144		(Visual)	(S.U.)	(mS/cm)	(⁰ C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow	v - Grundfos	clear	5.88	0.312	14.29	7.2	4.11		241
PURGE DATA:			THANK!						
Date: 1-16-	-12	Volume	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow	v - Grundfos								
Monitor Reading ((ppm): 0.6						***		
Well Casing Diam		***			***************************************				
Type: ス" Sche			.l	See Low E	lour Durge Ch	eet for Details			
Total Well Depth			1	266 FOM L	low Fulge Sit	eet for Details			
		***************************************			· · · · · · · · · · · · · · · · · · ·			-	
Static Water Leve			<u> </u>						
One Casing Volur	-		ļ	ļ					
Start Purge (hrs):									
End Purge (hrs):	1440								
Total Purge Time	(min): 7 0								
Total Vol. Purged	(gal/L): 7.5								
SAMPLE COLLE	CTION INFORMAT	TION:							
	Analysis		Preser	vative		Container Re	quirements		Collected
			HCI		3 40-	mL clear glass	vials		3
,	TCL VOCs		1		******	_ambler glass \			ュ
	PCBs								
***************************************	PCBs xavalent Chromium					0-mL plastic bo			
Total M	PCBs xavalent Chromium letals (Total Cr and		 HNO3		1 50	0-mL plastic bo	ottle		
Total M	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and		НИОЗ		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M	PCBs xavalent Chromium letals (Total Cr and				1 50 1 50	0-mL plastic bo	ottle ottle		
Total M	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and		НИОЗ		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and		НИОЗ		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and		НИОЗ		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle	,	
Total M	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and		НИОЗ		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and		НИОЗ		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and TOC		НИОЗ		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M Filtered N	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and TOC	i Fe)	HNO3 H2SO4		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M Filtered N OBSERVATIONS Pump set within se	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and TOC	1 Fe)	HNO3 H2SO4		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M Filtered N OBSERVATIONS Pump set within se	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and TOC	1 Fe)	HNO3 H2SO4		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M Filtered N OBSERVATIONS Pump set within se	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and TOC	1 Fe)	HNO3 H2SO4		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M Filtered N OBSERVATIONS Pump set within se	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and TOC	1 Fe)	HNO3 H2SO4		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M Filtered N OBSERVATIONS Pump set within se	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and TOC	1 Fe)	HNO3 H2SO4		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle		
Total M Filtered N OBSERVATIONS Pump set within se	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and TOC TOC 6 / NOTES: creened intervals ~2 nium Test Kit Result	1 Fe)	HNO3 H2SO4		1 50 1 50	0-mL plastic bo 0-mL plastic bo	ottle ottle vials		
Total M Filtered M Pump set within set Hexavalent Chrom	PCBs xavalent Chromium letals (Total Cr and Metals (Total Cr and TOC TOC 6 / NOTES: creened intervals ~2 nium Test Kit Result	1 Fe)	HNO3 H2SO4		1 50 1 50	0-mL plastic bo 10-mL plastic bo nL amber glass	ottle ottle vials		



PROJECT SITE NAME:	NWIRP Bethpage Site 1	WELL ID.:	BPSI-TK-MW308I
PROJECT NUMBER:	112G02230	DATE:	1-16-12

Time (Hrs.)	Water Level	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)		DO (mg/L)	Temp.	ORP mV	Salinity % or ppt	Comments
1315	55.69		-	*-	-	_	_			Intral
1330	55.71	425	6.16	0 249	617	11.02	11.03	255		cloudy (Gry-Brn)
1335	55.71	425	6.07	6.272	844	9.91	12.25	230	-	down (Brown)
1340	55.71	425	5.96	0.319	403	8.66	14.77	216	*****	elousy (Bonus)
1345	55.71	425	5.94	0.319	226		14.28	220		cloudy (Brown)
1350	55.71	425	5.91	0.318			13.99	223		Tinted (Gray-Tan)
1355	55.71	425	5.91	0.319		4.96	13.98	225	-	Shelt Tist (Gov)
1400	55.71	425	5.90	0.319	69.3	4.93	13.97	227		" "
1405	55.71	425	5.90	0.316	40.4	4.60	14.62	229	-	Slight Tist (Gov) very Slight Tist (Gov)
1410	55.71		5.90	0.315	29.2	4.38	14.06	231	-	il n a a
1415	55.71				ス1・5	4,29	14.09	234	•	clear
1420	55.71			0.314	15.3		14.12	238	•	clear
1425	<i>55.</i> 7(5.89	0.313	9.6	4.19	14:17	239	7-#	clear
1430	55.71	425	5.89	0.313	8.7	4.17	14.22	240	-	clear
1435	55.71		5.88	0.313	7.9	4.14	14.26	241	-	clese
1440	55.71	425	5.88	6.312	7.2	4.11	14.29	241	_	clear clear-collect semple
										<i>y</i>
~~~	***************************************						:			
										44000
				***************************************						

SIGNATURE(S):



Page<u>/</u> of <u>/</u>

Project Site Project No.:	Name:	NWIRP Beth 112G02230	npage Site	<u> </u>	*****	Sample ID Sample Lo Sampled E	BPS1-77-MV	<u>9-0116-242</u> N38 <u>8</u> ()	
[X] Monit	stic Well Data coring Well Data Well Type: mple Type:	<b>a</b>	***************************************			C.O.C. No Type of Sa [X] Lo			
SAMPLING DAT	A: missiple in the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of								
Date: /-/6-/	ユ	Color	рН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Time: 123		(Visual)	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flov	v - Grundfos	61635	5.99	0.170	14.51	6.5	5.24		221
PURGE DATA:									
Date: 1-/6-	/	Volume	pН	s.c.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flov	v - Grundfos								
Monitor Reading	(ppm): <b>ひ</b> 。ひ								
Well Casing Dian	neter & Material								
Type: ス "Sch	edule 40 PVC	5	***************************************	See Low F	low Purge Sh	eet for Details	<del></del>		
Total Well Depth	(TD): 26c			T					
Static Water Leve	WL): 53.30								
One Casing Volu			<u> </u>						
Start Purge (hrs):									
End Purge (hrs):	1230		<u> </u>						
Total Purge Time				<u> </u>					
·									
Total Vol. Purged	CTION INFORMA	TION:	l Dálastronskáli	liderika () ka (U Carlo			elek kerdalan kanalah	espaga a se e e e e e e e e e e e e e e e e e	objektorije rajobanja rijobio kajos
	Analysis		Preser	vative		Container Re	equirements	ggriffigire en tre pe	Collected
	TCL VOCs		HCI	*411*0	3 40-	-mL clear glass			3
715	PCBs					L ambler glass			Z
He	xavalent Chromium		1			50-mL plastic b	***************************************		
Total N	letals (Total Cr and	Fe)	НИОЗ		1 50	00-mL plastic b	ottle		i
Filtered	Metals (Total Cr and	l Fe)	ниоз		1 50	00-mL plastic b	ottle		-
	TOC		H2SO4		3 40-r	mL amber glas	s vials		
			<u> </u>						
···			<u> </u>						
			1						
***************************************									
OBSERVATIONS	S/NOTES:				J kataly rástiki i s				988881 (85 CERSAL)
	screened intervals ~2								
Circle if Applica									
	ble:			hara-Katan II		Signature(s)	):		



PROJECT SITE NAME: PROJECT NUMBER:

NWIRP Bethpage Site 1

112G02230

WELL ID.: DATE:

BPS1-TT-MW3090

Time	Water Level	Flow	рH	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
1105	56.30	·			_		•			Initial
111.5	56.31	400	5.67			9.50	12.45	266	<b></b>	Slight Tint (Tan)
1120	56,31	400	5.95	0.160	204	7.88	12.72	262	*	Slightly cloudy
1125	56.31	400	6.00	0.162	190	6.18	13.41	192	*	Tinked (Tan)
1130	56.31	400	6.01	0.162	186	6.12	13.59	194	, airine	Tinted (Tan)
1135	56.31	400	6.04	0.164	132	5,97	13.62	197		11 11
1140	56.31	400	6.08	0.164	103	5.95	13.80	198	<del></del>	Slight Tint (Tan)
1145	56.31	400	6.04	0.167	55,2	5.69	14.12	190		very slight Tist (Tan)
1150	56.31	400	6.03	0.170	47.6	5.72	14.29	202	-	ad he is the
1155	56.31	400	6.01	0.171	34.3	5.63	14.33	212	***	10 14 10 11
1200	56.31	400	6.01	0.172	27.1	5.45	14.30	216	-	20 11 14 11
1265	56,31	400	6.00	0.171	16.8	5.36	14.41	212		cledr
1210	56.31	400	6.00	0.170	9.7	5.31	14.45	218	·	Clear
1215	56.31	400	6.00	0.170	8.6	5. 28	14.49	219	***	clear
1220	56.31	400	5.99	0.170	6.5	5.24	14.51	22/		clear - collect sample
	***************************************									
	MMM									
							·····			
		,			· · · · · · · · · · · · · · · · · · ·					
							····			
			***************************************							
									_	
	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·							
	***************************************									
					***************************************			<u> </u>		- At
	:									

SIGNATURE(S): ___

PAGE / OF /



							raye_	T 01 T		
Project Site Name:	SITE	ı De	R Th	IVES.	Sample	ID No.: 13-P	らし- TT ト	- 0110 2012		
Project No.:	11260			, v.	Sample ID No.: <u>BPS1-TT-M₩09S</u> Sample Location: <u>BPS1-TT-M₩09S</u>					
1 10,000 110	11200		<u> </u>		Sampled By: S3C					
[] Domestic Well Data					C.O.C. No.: 1106					
★ Monitoring Well Data					Type of					
[] Other Well Type:					[] Low					
[] QA Sample Type:						Concentra				
li di Campio Typo										
SAMPLING DATA:			page la la				skipserbildig kil	t Angleyste		
Date: 1/10/12	Color	pН	s.c.	Temp.	Turbidity	DO	Salinity	Other		
Time: 1500	(Visual)	(S.U.)	(mS/cm)	( ⁰ C)	(NTU)	(mg/l)	(%)	ORP		
Method: SUB PUMP	CLEAR	6.52	.317	17.11	<u>'ધા</u>	3,54	_03	155		
PURGE DATA:	zu ur bujbyrás	da ayyar i	i y ji tiliyat			A, Europe Section		entra en profis		
Date: 1/10/12	Volume	рН	s.c.	Temp.	Turbidity	DO	Salinity	Other		
Method: 2"SUB										
Monitor Reading (ppm):										
Well Casing Diameter & Material				•						
Type: 2" PVC								·		
Total Well Depth (TD): 65.00	TPVC									
Static Water Level (WL): 56.00										
One Casing Volume(gal/L):										
Start Purge (hrs): 1230	***									
End Purge (hrs): 1500								,		
Total Purge Time (min):) 150										
Total Vol. Purged (gal/L):										
SAMPLE COLLECTION INFORMA	TION:		ARPYLLIO							
Analysis		Preser	vative		Container R	equirements		Collected		
VOC-5	HCL/	4°C	3-	V						
PCBS	4,8	ĴC .	2-	2- IL AMBER						
TAL METALS (T)	HN03/	/ 4° C.	1 -	1- 250 ml PE (500 ml)						
TAL METALS (D)		HN03/4°C		1 :	1 - 250m1 PE (500 ML					
HEX CR.		400		}	250m	V				
TOC		H2504/4°C 3:			HOM	NO				
		7								
		(8)			TOTAL					
			<del>.</del>				<b></b>			
OBSERVATIONS / NOTES:	1 1 - 1	11.11.11	rigida de la composição	aga sa elippis el	garan andy is	Talkara ya Ka	ata i jeta vije i	NAME OF THE STREET		
SCREEN 53-63B	GS		AVE	FLOW	300 w	il/min				
	·							,		
- Repurse well a analysis. Well f	m 1-24	1-12 +	le, cons	built the	xovstart	Chroni	un Tes	+ Kit		
enalysis. Well f	oursed	101-	<u>60</u> N	instes	at 40	w MLIM	un.			
Hexavalet Chie	mical	Test	K.+	Result	-> 0	1.01 mg.	/L			
Circle if Applicable:					Signature(	s):				
MS/MSD Duplicate ID No	.:				7 en c					
		-				(Conti	Ĵ			



PROJECT SITE NAME: PROJECT NUMBER:

SITE | PCB INVES

WELL ID.: DATE: MW BPS1-TT-V3095 1/10/12

	Time	Water Level	Flow	Нq	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
	(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
	1200	56.00	~200	_							
	1215	56.00	13		+		•			Œ	PUMP ADJUSTMENT
米	1230	56,00	~ 300	j		_					START *
	1245	56.00	13	<i>0</i> ن ن	324	461	4.01	17,14	157	.02%	SL TURBID
	1300	54,02	ŧı	ن.50	-322	189	3.51	17.10	153	.02%	., .,
	i3 15	56.02	i,	6.52	. 320	115	2.75	16.59	163	<b>∵</b> ひヹ゙%	
	1330	56.02	11	6.54	.319	174	3-86	17.37	155	.02%	
	1345	56.00	i i	4.53	.321	115	3-54	17.18	162	-02%	•
	1400	56.02	. 11	6.52	.321	60	3.39	17.33	160		BECOMES CLEAR
	1415	56.02	il	4.55	.319	48	3.56	18-10	150		<u>a.</u> 11
	1430	56.02	it	6.53	.317	61	3,59	16.92	161	. 02%	
	1445	56.02	11	6.51	-317	45	3.61	17.10	163	-03%	t/
	1500	<u> 56.02</u>	61	6.52	.317	41	3.54	17.11	155	.02%	
											<u></u>
			<u> </u>	= - !=-=	Henc				<u> </u>		
			SAMPU	E@1500	) HISS.		<u> </u>				
							!				
			<del> </del>								
	X										
							<u> </u>				
			<u> </u>								
						***		FLOW RA	TE VARY	3003 500	ml/min
											oml/min-
			-				<del>                                     </del>	170→ 19		ON BOX	
								10 - 1	10 11-	2.4 1307	
				· · · · · · · · · · · · · · · · · · ·			<del> </del>			l	

SIGNATURE(S):	Sh Conti
· · · · · · · · · · · · · · · · · · ·	()



			· · · · · · · · · · · · · · · · · · ·					Page	of   01112012	
Project Site I Project No.:	Name:	SITE 1 PCB INVESTIGATION 112G02230				Sample Sample Sample	Location:	BPS1-TT-MW369I- BPS1-TT-MW 309T SJC		
[X] Moni [] Other	stic Well Data toring Well Dat Well Type: imple Type:	a				C.O.C. N Type of [X] Lov	_	ration		
SAMPLING DAT	A:								SAL.	
	/ 11 / 12	Color	Hq	S.C.	Temp.	Turbidity	DO	ORP	Other	
	000	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA O	
Method: 2	2" GRUNDFOS	CLEAR	5.62	_312_	15.48	5-91	5.58	213	,010/6	
								1		
Date: 1/11/		<u> </u>								
	2" GRUNDFOS	<b></b>								
Monitor Reading (		<u> </u>								
Well Casing Dian										
	PVC							ļ		
Total Well Depth	(TD): ~172'	TPVC						<b></b>		
Static Water Leve	1 (WL): 56.7C	TPVC								
One Casing Volu	me(gai/L):									
Start Purge (hrs):	0900									
End Purge (hrs):	1000									
Total Purge Time	(min): 60									
Total Vol. Purged	(gal/L):									
SAMPLE COLL	ECTION INFORMA	TION: Strike	thru analy	sis not re	quired			05 (607)5 (707)59		
	Analysis		Preser	vative		Container R	equirements		Collected	
VOCs				DEG C	3-4	0ml Glass V	ials		V _/	
PCBs				GC		2-1L Amber			<u> </u>	
	OT Crand Ea (Tai	tal)		DEG C		1-500ml PE			<u> </u>	
		TAL METALS TOT Cr and Fe (Dissolved)		HNO3/4 DEG C 4 DEG C		1-500ml PE				
TAL METALS T		solved)				4 250ml DE			1/	
TAL METALS TO HEX CHROME		solved)	4 DE	EG C	3 40m	1-250ml PE	e Viale			
TAL METALS TO HEX CHROME		ssolved)	4 DE		3-40m	1-250ml PE I Amber Glas	s Vials		Ž	
TAL METALS TO HEX CHROME		solved)	4 DE	EG C	3-40m		s Vials			
TAL METALS TO HEX CHROME		solved)	4 DE	EG C	3-40m		s Vials			
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	solved)	4 DE	EG C	3-40m		s Vials			
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	solved)	4 DE	EG C	3-40m		s Vials			
TAL METALS TO TAL METALS TO HEX CHROME TOC  OBSERVATION 2" MW = 0.163 g	OT Cr and Fe (Dis	ssolved)	4 DE	EG C		Amber Glas				
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	ssolved)	4 DE	EG C	1-24-12	Amber Glas		result=0	12mg/L	
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	isolved)	4 DE	EG C		Amber Glas		result=0	12mg/L 1/o acidin	
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	ssolved)	4 DE	EG C	1-24-12	Amber Glas		result=0	12mg/L 1/o acidin 1.06 mg/L 1.06 mg/L	
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	ssolved)	4 DE	EG C	1-24-12	Amber Glas		result=0	Jang/L N/o acidin l 06 mg/L with acidin b	
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	ssolved)	4 DE	EG C	1-24-12	Amber Glas		result= 0 0 0 v	1/2mg/L u/o acidin 106 mg/L vith acidin b	
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	ssolved)	4 DE	EG C	1-24-12	Amber Glas		result=0	Jang/L J/o acidin l J/o acidin l	
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	ssolved)	4 DE	EG C	1-24-12	Amber Glas		result=0	Jang/L J/o acidin l .06 mg/L with acidin b	
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis	ssolved)	4 DE	EG C	1-24-12	Amber Glas		result=0 =0 v	1/2mg/L U/o acidin l 1.06 mg/L uith acidin b	
TAL METALS TO HEX CHROME TOC  OBSERVATION: 2" MW = 0.163 g	OT Cr and Fe (Dis	ssolved)	4 DE	EG C	1-24-12	Amber Glas	bst kit	result=0	1,12mg/L J/o acidin .06mg/L with acidin b	
TAL METALS TO HEX CHROME TOC	OT Cr and Fe (Dis		4 DE	EG C	1-24-12	Hex Chian	bst kit	result = 0 = 0 v	1,12mg/L U/o acidin 1.06 mg/L uith acidin b	



PROJECT	SITE NAME:
DDO IECT	MIIMPED.

SITE ! PCB 112G02230 WELL ID.: DATE:

BPSI-TT-MW309I

1/11/12

Time	Water Level	Flow	pH (S <b>.U.</b> )	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0900	56.70	~ 400	~ (OIO)	-				_		CLOUDY, GRAY
0915	56.70	11	5.62	-323	೩೩3	5,95	15.24	182	.02%	SL TURBID
0930	56.70	((	5.62	315	87	5.75	15.27	199	·01%	BECOMES CLEARER
0940	56.70	- (1	5.61	-313	<b>25</b>	6-10	15, 29	202	01%	CLEAR
09 50	56.70	11	5.62	,312	9.98	5-54	15.40	<b>208</b>	0°10°	f1
1000	56.70	11	5.62	•3ia	5.91	5.58	15.48	213	.01%	( )
<u></u>	SAMPLE	1000	HISS.							
<u></u>										
	169.60 HZ				Hann man c					
113 00hc		1-20	1.	( (a+ .1. )	k:+					
4-12-0845	Start purpe Run Crev test Kit	(~ 50 M/	l then run	Cr6+test	47,1	<u> </u>				
<u> </u>	131 (1)									
		ļ								
						]				

SIGNATURE(S): July Bull for SC

PAGE__OF__



Page 1 of 1

01112012 SITE 1 PCB INVESTIGATION Project Site Name: Sample ID No.: I BPS1-TT-MW 309 D -Project No.: 112G02230 Sample Location: BPS1-TT-MW Sampled By: 57 C C.O.C. No.: [ ] Domestic Well Data 1107 [X] Monitoring Well Data Type of Sample: [ ] Other Well Type: [X] Low Concentration [ ] QA Sample Type: [ ] High Concentration SAMPLING DATA: SAL 111/12 Hq S.C. Temp. **Turbidity** DO ORP Other Date: Color 1410 NTU mV Time: Standard mS/cm Degrees C NA Visual mg/l01% 2" GRUNDFOS Method: V. SL 6.00 = ale-1 00.0 15,10 62.8 24 PURGE DATA: TURBID 1/11/12 Date: Method: 2" GRUNDFOS Monitor Reading (ppm): Well Casing Diameter & Material 2" 4 PVC Total Well Depth (TD): へ264 TPVC Static Water Level (WL): 56-59 TPVC One Casing Volume(gal/L): Start Purge (hrs): 1300 1410 End Purge (hrs): Total Purge Time (min): 130 Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMATION: Strike thru analysis not required Container Requirements Collected **Analysis** Preservative VOCs 3-40ml Glass Vials HCL/4 DEG C **PCBs** 4 DEG C 2-1L Amber HNO3/4 DEG C 1-500ml PE TAL METALS TOT Cr and Fe (Total) TAL METALS TOT Cr and Fe (Dissolved) HNO3/4 DEG C 1-500ml PE HEX CHROME 4 DEG C 1-250ml PE 3-40ml Amber Glass Vials TOC H2SO4/4 DEG C OBSERVATIONS / NOTES: 2" MW = 0.163 gal/ft Hex Chron test Kit result = 0.00 mg/L 1-54-10-0830 252-262 SCIREEN BGS Circle if Applicable: Signature(s): MS/MSD **Duplicate ID No.:** 



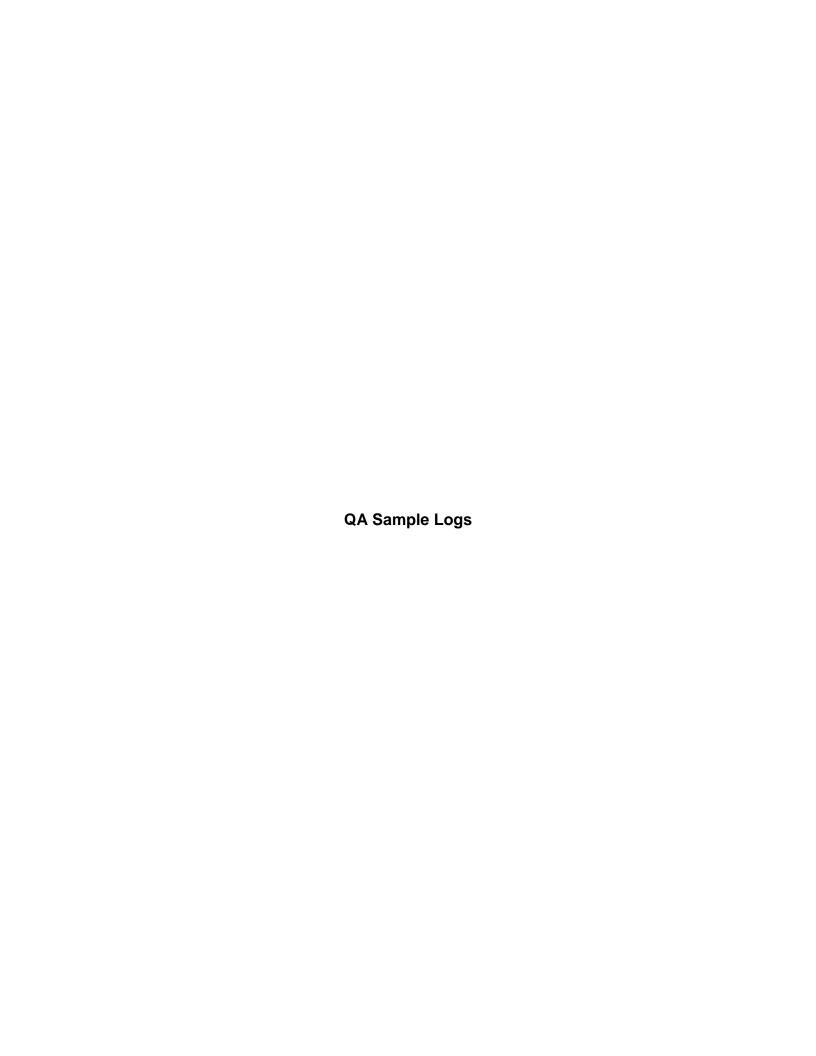
## **LOW FLOW PURGE DATA SHEET**

PROJECT SITE NAME:	SITE   PCB	WELL ID.:	BP51- TT- MW 309 D
PROJECT NUMBER:	112602230	DATE:	1/11/12

	Time	Water Level	Flow	рΗ	S. Cond.	Turb.	DO	Temp.	ORP	Salinity	Comments
	(Hrs.)	(Ft. below TOC)	(mL/Min.)	(S.U.)	(mS/cm)	(NTU)	(mg/L)	(Celcius)	mV	% or ppt	
	1200	56,59	^ 400	-		1	J				SL. TURBIO GRAY
	1210	56.69	11	6.22	,287	105	\$.50	15.48	112	·01 %	SL. il ii
[	1220	56.69	11	6.15	.284	67.3	0.00	15.56	117	.01%	BECOMING CLEAR
	1230	56.69	ř t	6-14	~ 380	68.5	0.00	15.59	118	·01%	11 11
	1240	56.69	ા	6-13	· 277	80.4	0.00	15.53	119	-01%	11 (1
	1250	56.69	E 1	6.11	-275	91.7	0.00	15.47	119	-01%	tı (1
Į.	1300	<u>56. C9</u>	ιſ	6.09	- 274	94.7	0.00	15.44	119	.01%	1, 11
[	1310	56.69	t (	6.07	·273	94.3	0.00	15,41	120	·01%	31
1	1320	56.69	Į,	6.0.5	·271	84.5	0.00	15,22	121	-01%	·
1	1330	56.69	~ 300	6.02	<u>. 271</u>	74.8	$0.\infty$	15.27	132	01%	(c ts
	1340										•
L	1350	56.69	ιι	6.01	.269	72.8	<u>ం.య</u>	15.33	124	-01%	te **
l l	1400	<u>56. 69</u>	¿¢	602	-268	63.1	0.00	15.11	しユリ	<u> 01 % </u>	V.SL TURBID
	1410	56.69	4.1	6.00	-267	62.8	0.00	<u>15.10</u>	124	-01%	
				·							
l l											
			SAMPLE	. e	1410						
		169.00 HZ	,	· / F:	<u></u>	~ ~ .	/ / 12:4				
1-24-12	0755	Start purge	(run for	~15 min	then per-		test Kit				
	UB30	Run Cr61 tost kit	,			27.j					
		0,000/mJ	<u> </u>								
]		•					ļ				
]							<u> </u>				
-											

SIGNATURE(S): Sy Corta

PAGE_LOF_L





## Tetra Tech NUS, Inc. QA SAMPLE LOG SHEET

		Pa	ge of		
Project Number: Sample Location: QA Sample Type:	NRP Bethpage Site 1 112G02230 Site 4  Arip Blank Source Water Blank	Sample ID Number: BPS1- TBの1- Sampled By: <u>Jほ/しゅん</u> C.O.C. Number: [] Rinsate Blank [] Other Blank	01162012		
SAMPLING DATA:		WATER SOURCE:			
Date:         1-16-           Time:         0935           Method:         Lab	12 orepared	Laboratory Prepared [] Tap [] Purchased [] Fire Hydrant [] Other			
PURCHASED WAT (If Applicable as Sour	44. C. C. C. C. C. C. C. C. C. C. C. C. C.	RINSATE INFORMATIOI (If Applicable):	7		
		Media Type:  Equipment Used:  Equipment Type:  [] Dedicated  [] Reusable			
SAMPLE COLLECTION II	VEORMATION:				
Analysis	Preservative	Container Requirements	Collected		
<b>Analysis</b> Volatiles	Preservative Cool 4°C & HCl	2 2/40-mL clear glass vials	YES/NO		
Analysis Volatiles PCBs	Preservative Cool 4°C & HCl Cool 4°C	2 1-L amber glass bottles	YES / NO		
Analysis Volatiles PCBs TAL Metals	Preservative Cool 4°C & HCl Cool 4°C Cool 4°C & HNO ₃	2 8/40-mL clear glass vials 2 1-L amber glass bottles 1 500-mL plastic bottle	YES/NO YES/NO YES/NO		
Analysis Volatiles PCBs	Preservative  Cool 4°C & HCl  Cool 4°C  Cool 4°C & HNO ₃ Cool 4°C	2 40-mL clear glass vials 2 1-L amber glass bottles 1 500-mL plastic bottle 1 250-mL plastic bottle	YES/NO YES/NO YES/NO YES/NO		
Analysis Volatiles PCBs TAL Metals Hexavalent Chromiun	Preservative Cool 4°C & HCl Cool 4°C Cool 4°C & HNO ₃	2 40-mL clear glass vials 2 1-L amber glass bottles 1 500-mL plastic bottle 1 250-mL plastic bottle	YES/NO YES/NO YES/NO		
Analysis Volatiles PCBs TAL Metals Hexavalent Chromiun	Preservative  Cool 4°C & HCl  Cool 4°C  Cool 4°C & HNO ₃ Cool 4°C  Cool 4°C  Cool 4°C	2 40-mL clear glass vials 2 1-L amber glass bottles 1 500-mL plastic bottle 1 250-mL plastic bottle	YES/NO YES/NO YES/NO YES/NO		
Analysis Volatiles PCBs TAL Metals Hexavalent Chromiun TOC	Preservative  Cool 4°C & HCl  Cool 4°C  Cool 4°C & HNO ₃ Cool 4°C  Cool 4°C  Cool 4°C	2 40-mL clear glass vials 2 1-L amber glass bottles 1 500-mL plastic bottle 1 250-mL plastic bottle	YES/NO YES/NO YES/NO YES/NO		



#### **QA SAMPLE LOG SHEET**

Page_*i*_of <u>/</u> Project Site Name: NWIRP Bethpage Site 1 Sample ID Number: BPS1-TB02-01182012 Project Number: 112G02230 Sampled By: Sample Location: C.O.C. Number: QA Sample Type: Trip Blank Rinsate Blank Source Water Blank [] Other Blank SAMPLING DATA: WATER SOURCE: 1-18-2012 Laboratory Prepared Date: [] Tap [] Purchased [] Other Time: [] Fire Hydrant Method: PURCHASED WATER INFORMATION RINSATE INFORMATION (If Applicable as Source or Rinsate Water): (If Applicable): Product Name: Media Type: Supplier: Equipment Used: Manufacturer: Equipment Type: Order Number: I Dedicated Lot Number: [] Reusable Expiration Date: SAMPLE COLLECTION INFORMATION: Analysis **Preservative Container Requirements** Collected Volatiles Cool 4°C & HCl YES //NO 3 40-mL clear glass vials **PCBs** Cool 4°C 2 1-L amber glass bottles YES MO TAL Metals Cool 4°C & HNO₃ 1 500-mL plastic bottle YES /410 Cool 4°C Hexavalent Chromium 1 250-mL plastic bottle YES/40 Cool 4°C & H₂SO₄ TOC 3 40-mL amber glass vials YES/NO OBSERVATIONS / NOTES: Signature(s):



## Tetra Tech NUS, Inc. QA SAMPLE LOG SHEET

Page___ of __\

Sample Location:  QA Sample Type:  ↑★Trip	G02230 Lab propil	Sample ID Numb Sampled By: C.O.C. Number:  [] Rinsate Bland [] Other Bland	nk	21192012
SAMPLING DATA:		WATER SOURCE:	Ventrallinas etak	
Date:         1-19-12           Time:         0745           Method:         Lab prepared	**Laboratory Prepa [] Purchased [] Other	[] Fire Hy	drant	
PURCHASED WATER IN (If Applicable as Source or			ATE INFORMATION (If Applicable):	
Product Name: Supplier: Manufacturer: Order Number: Lot Number: Expiration Date:		Media Type: Equipment Used: Equipment Type:	[] Dedicated [] Reusable	
SAMPLE COLLECTION INFOR	MATION:			
Analysis	Preservative		Requirements	Collected
Volatiles	Cool 4°C & HCl	·	clear glass vials	(YES )NO
PCBs TAL Metals	Cool 4°C	***************************************	per glass bottles	YES (NO)
	Cool 4°C & HNO ₃	<del>}</del>	plastic bottle	YES/40
Hexavalent Chromium TOC	Cool 4°C & H ₂ SO ₄		plastic bottle amber glass vials	YES/NO
	4			
OBSERVATIONS / NOTES:		Signature(s):	7	
		Con	Bull	



#### **QA SAMPLE LOG SHEET**

Page of Project Site Name: NWIRP Bethpage Site 1 Sample ID Number: BPS1-TB64-01202012 Project Number: 112G02230 Sampled By: Sample Location: Site4/Lab C.O.C. Number: QA Sample Type: ∄ Trip Blank [] Rinsate Blank [] Source Water Blank Other Blank SAMPLING DATA: WATER SOURCE: Date: 10-20-12 ★Laboratory Prepared [] Tap Time: Purchased [] Fire Hydrant Method: [] Other prepared **PURCHASED WATER INFORMATION** RINSATE INFORMATION (If Applicable as Source or Rinsate Water): (If Applicable): Product Name: Media Type: Supplier: Equipment Used: Manufacturer: Equipment Type: Order Number: _____ [] Dedicated Lot Number: [] Reusable Expiration Date: SAMPLE COLLECTION INFORMATION: **Analysis** Preservative **Container Requirements** Collected Volatiles Cool 4°C & HCl 240-mL clear glass vials YES/NO Cool 4°C **PCBs** YES (NO) 2 1-L amber glass bottles TAL Metals Cool 4°C & HNO₃ 1 500-mL plastic bottle YES MO Hexavalent Chromium Cool 4°C 1 250-mL plastic bottle YES /NO TOC Cool 4°C & H2SO4 3 40-mL amber glass vials YES/NO OBSERVATIONS / NOTES: Signature(s):



#### **QA SAMPLE LOG SHEET**

Page___ of _ Project Site Name: NWIBEthpage Sample ID Number: BPSI-TBO5-01232012 JB/Cab Sampled By: Project Number: Site 4/Lab C.O.C. Number: Sample Location: QA Sample Type: rip Blank [] Rinsate Blank [] Source Water Blank [] Other Blank **WATER SOURCE: SAMPLING DATA:** 1-53-15 Laboratory Prepared [] Tap Date: ∏ Fire Hydrant Purchased 0730 Time: Method: [] Other RINSATE INFORMATION **PURCHASED WATER INFORMATION** (If Applicable): (If Applicable as Source or Rinsate Water): Media Type: Product Name: Supplier: Equipment Used: Equipment Type: Manufacturer: Order Number: [] Dedicated [] Reusable Lot Number: **Expiration Date:** SAMPLE COLLECTION INFORMATION: **Container Requirements** Collected **Analysis** Preservative 40 ML glass vials Cool 4°C & HCl YES NO Volatiles YES /NO Cool 4°C Semivolatiles YES /(NO Pesticide / PCB Cool 4°C Cool 4°C & HNO₃ YES (NO Metals YES / NO. Cool 4°C & NaOH Cyanide **OBSERVATIONS / NOTES:** Signature(s):



## Tetra Tech NUS, Inc. QA SAMPLE LOG SHEET

Page___ of ____

Sample Location: F  QA Sample Type:  [] Trip    XI Sour	602230 el Juffree	Sample ID Number: Sampled By: C.O.C. Number:  [] Rinsate Blank [] Other Blank	VAS and JI	
SAMPLING DATA:		WATER SOURCE:		
Date:         1-18-12           Time:         0810           Method:         Direct Pour		[] Laboratory Prepared ∬Purchased [] Other	d [] Tap [] Fire Hy	drant
PURCHASED WATER INF (If Applicable as Source or F			E INFORMATION Applicable):	
Product Name: Distilled Was Supplier: Stop + She Manufacturer: Os waters of Order Number: Lot Number: Expiration Date: 1-/2-/	America	Media Type:	Dedicated Reusable	
SAMPLE COLLECTION INFORM	IATION:			
Analysis	Preservative	Container Rec	uirements	Collected
Volatiles	Cool 4°C & HCl	3 40-mL clea	ar glass vials 🧸	YES) NO
PCBs	Cool 4°C		glass bottles	(YES) NO
TAL Metals	Cool 4°C & HNO ₃	1 500-mL pla		YES) NO
Hexavalent Chromium	Cool 4°C	1 250-mL pla		YES) NO
TOC	Cool 4°C & H ₂ SO ₄		ber glass vials	YES/NO
TAL Metals (disselved)	Cosi 4°C+HNO2	1 500 ML	plastic	(jes)
OBSERVATIONS / NOTES:				
		Signature(s):	AL	



#### **QA SAMPLE LOG SHEET**

Page___ of_ NWIRP Bethpar Sample ID Number: BPSI-FB02-01232012 Project Site Name: J. Birket Sampled By: Project Number: Main Building near C.O.C. Number: Sample Location: QA Sample Type: [] Trip Blank Rinsate Blank [] Other Blank JRSource Water Blank **WATER SOURCE: SAMPLING DATA:** 1-23-12 [] Laboratory Prepared *Tap Date: [] Fire Hydrant [] Purchased Time: ○ Other Method: RINSATE INFORMATION **PURCHASED WATER INFORMATION** (If Applicable as Source or Rinsate Water): (If Applicable): Media Type: Product Name: Equipment Used: Supplier: Equipment Type: Manufacturer: Dedicated Order Number: [] Reusable Lot Number: **Expiration Date:** SAMPLE COLLECTION INFORMATION: Collected **Container Requirements Preservative** Analysis 40 ml glass vials YES / NO Cool 4°C & HCl Volatiles asome poly bottle Semivolatiles Hexavalent Chien Cool 4°C (XES)/NO 2 1 L comber glass boiles YES/NO Cool 4°C Pesticide / PCB YES/NO Cool 4°C & HNO₃ 500 ML poly bettle Metals (Fet Cr YES (NO Cool 4°C & NaOH Cyanide **OBSERVATIONS / NOTES:** Direct fill from hose in main building. Water used for decon. Hex. Chrom. Test Kit Result: O. Oong/L Signature(s): Ball



## QA SAMPLE LOG SHEET

Page__/_of__/_

Sample Location:  QA Sample Type:  [] T	P Bethpage Site 1 12G02230 Feld office rip Blank ource Water Blank	Sample ID Number: BPS1- RBSI-0118: Sampled By: C.O.C. Number:    VAS and JB	201 <u>2.</u>
SAMPLING DATA:		WATER SOURCE:	
Date:         1-18           Time:         082           Method:         1 inch pc	-/2 0	[] Laboratory Prepared [] Tap  [] Purchased [] Fire Hydrant [] Other	
PURCHASED WATER (If Applicable as Source	i propertito polgranua allega fira postarel Rich (1866 Rich	RINSATE INFORMATION (If Applicable):	
Product Name: Distille Supplier: Step to Shanufacturer: Distille Order Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number: Lot Number:	Shop A America	Media Type:  Equipment Used:  Equipment Type:  [] Dedicated    Reusable	-
SAMPLE COLLECTION INFO	RMATION:		politica pia
Analysis	Preservative	· · · · · · · · · · · · · · · · · · ·	lected
Volatiles	Cool 4°C & HCl	13	ś⁄/ NO
PCBs	Cool 4°C		S) NO
TAL Metals	Cool 4°C & HNO ₃		s)NO
Hexavalent Chromium TOC	Cool 4°C		\$)/ NO S /(NO')
	Cool 4°C & H ₂ SO ₄		
TAL Metals (11550local	Col 4°C+ HNO3	1500 MI plestic (ye	<u> </u>
- Water powed directly into s	over clearersmphe botthe	& Redi-Plow pump es	



## Tetra Tech NUS, Inc. QA SAMPLE LOG SHEET

Page<u>l</u> of <u>\</u>

Project Number: \(\)\2 Sample Location: QA Sample Type: [] Trip	RP Bethpage G02233	Sampled By: 3. Birket  C.O.C. Number:  **Rinsate Blank	32012
SAMPLING DATA:		WATER SOURCE:	
Date:         1-23-12           Time:         1330           Method:         Direct pair or	ver pump	[] Laboratory Prepared [] Tap  R Purchased [] Fire H  [] Other	ydrant
PURCHASED WATER INF (If Applicable as Source or F	And the second section of the first beautiful to	RINSATE INFORMATION (If Applicable):	
Product Name: Arcadia Distinction Supplier: Stop N Shop Manufacturer: DS Waters of Order Number: Lot Number: Expiration Date: 1-12-14		Media Type:  Equipment Used:  Equipment Type:  [] Dedicated    Reusable	d.flo.
SAMPLE COLLECTION INFOR	MATION:		
Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40 ML glass vials	YESDNO
Volatiles Semivolatiles PCBS	Cool 4°C & HCI Cool 4°C		YES NO YES NO
Volatiles Semivolatiles PCB 5 Resticide / PGB	Cool 4°C & HCl Cool 4°C Cool 4°C	3 40 mL glass vials 2 IL Amber bollles	YES NO YES NO
Volatiles Semivolatiles PCBS Resticide / PCB Metals (Fet Cross)	Cool 4°C & HCI Cool 4°C Cool 4°C Cool 4°C & HNO ₃	3 40 ml glass vials 2 1 L Amber boilles 1 25 500ml poly boille	YES NO YES NO YES NO YES NO
Volatiles Semivolatiles PCB 5 Resticide / PGB	Cool 4°C & HCl Cool 4°C Cool 4°C	3 40 ml glass vials 2 1 L Amber boilles 1 25 500ml poly boille	YES NO YES NO
Volatiles Semivolatiles PCB 5 Resticide / PGB Metals (Fet Cram) Cyanide	Cool 4°C & HCl Cool 4°C Cool 4°C Cool 4°C Cool 4°C & HNO ₃ Cool 4°C & NaOH	3 40 ml glass vials 2 I L Amber bottles 1 25 500ml poly bottle	YES NO YES NO YES NO YES NO YES NO
Volatiles Semivolatiles PCBS Resticide / PCB- Metals (Fet Cran) Cyanide Hexavalent Chrom	Cool 4°C & HCl Cool 4°C Cool 4°C Cool 4°C Cool 4°C & HNO ₃ Cool 4°C & NaOH	3 40 ml glass vials 2 I L Amber bottles 1 25 500ml poly bottle	YES NO YES NO YES NO YES NO YES NO
Volatiles Semivolatiles PCBS Resticide/PCB Metals (Fet Crow) Cyanide Hexavalent Chrom  OBSERVATIONS/NOTES:	Cool 4°C & HCl Cool 4°C Cool 4°C Cool 4°C & HNO ₃ Cool 4°C & NaOH Cool 4°C	3 40 ml glass vials 2 1 L Amber boilles 1 25 500ml poly boille 1 250 poly boille	YES NO YES NO YES NO YES NO YES NO



Ŧ	Tetra Tech NUS, Inc
---	---------------------

#### GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name:	NWIRP Bethpage Site 1 GW Sampling	_ Project No.:	112G02230
Location:	Site 1 - Former Drum Marshalling Area	Personnel:	J. Birkett, V. Shickora
Weather Conditions:	High 40° surry breezy	_ Measuring Do	evice:

Tidally Influenced: Yes ___ No _X_ Remarks:

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	the distance of distance is a function from the contract of the	Comments
BPS1-FW-MW01	1-24-12	1450		63.47	52.25		- Alexandra	
BPS1-FW-MW02	1	1443		64.18	52.89			
BPS1-FW-MW03		1446	*	67	51.39			
BPS1-HN-MW-29[		1545		130.5	42.15			
BPS1-HN-MW-29D		1546			42,33			
BPS1-TT-MW301S		1438		62	51.24			
BPS1-TT-MW301I		1436		141	51-81 51.0 51-08 51.8	8		
BPS1-TT-MW301D		1435		221	5408 518	4		·
BPS1-TT-MW302S		1504		53.65	42.38			
BPS1-TT-MW302I1		1507		121	42.43			
BPS1-TT-MW302I2		1501		151	42.69			7. 2
BPS1-TT-MW302D		1500		218	4296			
BPS1-TT-MW303S		1512		55.84	42.13			
BPS1-TT-MW303I1		1510		106	42.50			
BPS1-TT-MW303l2		1568		157	42.84		Nige	
BPS1-TT-MW303D		1506		228	43.61			- 11 - <u>\$</u>
BPS1-TT-MW304S		1544		54	46.03	jil.		
BPS1-TT-MW304I1		1543		113 ,	46,26			
BPS1-TT-MW304l2		1541		150.3	46.45			
BPS1-TT-MW304D		1540		191	46,60			
BPS1-TT-MW305S		1514			46,60 42.96 43.55			9: 11 %
BPS1-TT-MW305I		1516			43.55			79-7
BPS1-TT-MW305D		1517			43.78			
BPS1-TT-MW306S		1530			44,90			Sip coupling lossebut Fight
BPS1-TT-MW306I	=	1528			45.34	<u></u>		

TŁ	Tetra Tech NUS, Inc.
----	----------------------

#### GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: Location: Weather Cond Tidally Influe	litions:	NWIRP Be Site 1 - For	thpage Site 1 GW Sa mer Drum Marshallin	mpling	- *	112G02230 J. Birkett, V.	***************************************	
Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	to a construct control of the control of	Groundwater Elevation (feet)*	Comments
3PS1-TT-MW306D	1-24-12	1526			46.04			
BPS1-TT-MW307S	ĺ	1537			41.81			
BPS1-TT-MW307I		1535		200	42.21			
BP\$1-TT-MW307D		1533			42.64			
3PS1-TT-MW308S		1426		67	55,54			
BPS1-TT-MW308I		1427		170	55.70			
3P\$1-TT-MW308D		1428		260	56,27			
3P\$1-TT-MW309S		1420		67	<i>55,</i> 82			
3PS1-TT-MW309I		1421		177	56.45			
BPS1-TT-MW309D		1422		267	56.39			
3PS1-RA-MW02		1442			47.79			
3P\$1-RA-MW04		Cool	d not	locate	under san	Harave		South of Plant 3
						)		
							-	
						·		





#### SURFACE WATER SAMPLE LOG SHEET

Page___l of __l BPS1-5W3001 NWIRP Bethpage Sitel Sample ID No.: Project Site Name: Sample Location: BPSI-5W3001 Project No.: Sampled By: Ferguson C.O.C. No.: Il Stream [] Spring [] Pond Type of Sample: [] Lake **↓**Mow Concentration X Other: Storm Water Outfall [] High Concentration [] QA Sample Type: SAMPLING DATA: 10-19-2011 Turbidity Date: S.C. Temp. DO Other CRP (~V) Color Salinity pΗ Time: 1100 (Visual) (S.U.) (mS/cm) (°C) (NTU) (mg/l)(%) Depth: 18,16 20,5 4.95 0030 6.04 216 Clano Method: Direct Pour SAMPLE COLLECTION INFORMATION: Analysis Preservative **Container Requirements** Collected TCL VOC HCI 3 40 mL glass vin ls yes 1 L Amber bottles PCBs ve 5 Total / Hexavalent Chromium 500ml poly bottle HNO3 4-5 **OBSERVATIONS / NOTES:** MAP: Circle if Applicable: Signature(s): MS/MSD **Duplicate ID No.:** for Jim Ferguson



#### SURFACE WATER SAMPLE LOG SHEET

Page \(\frac{1}{2}\) of \(\frac{1}{2}\) NWIRP Bethpage Sitel Sample ID No.: Project Site Name: BPS1-5W3002 Sample Location: BPSI-SW 3002 Project No.: Sampled By: J. Fierguson C.O.C. No.: Stream [] Spring [] Pond Type of Sample: ★ Low Concentration [] Lake Storm Water Outfall Other: [] High Concentration [] QA Sample Type: SAMPLING DATA: 10-19-2011 Turbidity DO Other ORP (~v) Date: S.C. Temp. Salinity Color Нg 1130 Time: (Visual) (S.U.) (mS/cm) (°C) (NTU) (mg/l) (%) Depth: Clear 6.65 0,245 192 17.67 0,0 5.03 Method: Direct Pour SAMPLE COLLECTION INFORMATION: Preservative **Container Requirements** Collected Analysis TCL VOCS 40 ML glass vials Hel Ve5 1 Lamber bottle PCB5 405 500 mc poly bottle Total Hexavalent Chronium HNOS 4-5 MAP: OBSERVATIONS / NOTES: Signature(s): Circle if Applicable: MS/MSD **Duplicate ID No.:** 

Appendix B

Survey Data



■ Engineers

■ Surveyors

■ Construction Managers

■ Information Technology

300 Alexander Park, Suite 350 Princeton, NJ 08540 609.759.1900 phone 609.919.9022 fax

February 14, 2012

Robert Sok, P.G.
Project Manager / Geologist
Tetra Tech NUS, Inc.
Twin Oaks I, Suite 309
5700 Lake Wright Drive
Norfolk, VA 23502

Re.:

Survey Report

US Navy – NWIRP Bethpage, New York Subcontract # 1080854

Job # 112G02230 - CTO WE44 BANC3 Project # 2000215-04

Dear Mr. Sok,

Per your request, I have enclosed three signed and sealed copies of our Survey Report dated February 14, 2012 for the above captioned project. Two copies have been bound and one copy is provided unbound, for your use.

We appreciate the opportunity to work with Tetra Tech NUS, Inc. and the US Navy. Please contact me if you have any questions and/or require additional information.

Respectfully submitted,

Thomas F. Miller, PLS, PP



- Engineers
- Surveyors
- Construction Managers
- Information Technology

300 Alexander Park, Suite 350 Princeton, NJ 08540 609.759.1900 phone 609.919.9022 fax

Survey Report
U.S. Navy – NWIRP
Bethpage, New York
Subcontract # 1080854
Job # 112G02230 – CTO WE44
BANC3 Project # 2000215-04
February 14, 2012



■ Engineers

■ Surveyors

■ Construction Managers

■ Information Technology

300 Alexander Park, Suite 350 Princeton, NJ 08540 609.759.1900 phone 609.919.9022 fax

February 14, 2012

Robert Sok, P.G. Project Manager / Geologist Tetra Tech NUS, Inc. Twin Oaks I, Suite 309 5700 Lake Wright Drive Norfolk, VA 23502

Re.:

Survey Report

US Navy – NWIRP Bethpage, New York Subcontract # 1080854

Job # 112G02230 - CTO WE44 BANC3 Project # 2000215-04

Dear Mr. Sok,

BANC3 Inc. is pleased to provide you with our completed Survey Report for the above referenced project.

BANC3 performed field surveys relative to the subject project to include Global Positioning Systems (GPS), conventional Total Station Surveys and differential leveling surveys. From the data, a table of Monitoring Well and Soil Boring Locations was prepared and included herein. The table includes control points utilized, locations and elevations of Monitoring Well cover, inner casing and adjacent ground where appropriate and Soil Boring locations and elevations. BANC3 performed field reconnaissance and locations of survey control markers tied National Geodetic Survey (NGS) monument designated as "15E 14N" (PID # KU5039) included herein. BANC3 verified the positioning and accuracy of the Monitoring Wells and Soil Borings through our ground field locations and redundant measurements of survey control points. All locations are referenced to New York State Plane Coordinates (Long Island Zone), North American Datum of 1983 and elevations referenced to North American Vertical Datum of 1988. (NAD83, NAVD 88).

We appreciate the opportunity to work with your organization and the US Navy. Please contact me if you have any questions and/or require additional information.

Respectfully submitted,

Thomas F. Miller, PLS, PP

State of New York Professional Land Surveyor #050484

#### BETHPAGE, NEW YORK / JANUARY 26, 2012

## MONITORING WELL & SOIL VAPOR EXTRACTION WELL LOCATIONS

DESCRIPTION	GRID NORTH (US FT)	GRID EAST (US FT)	ELEV (US FT)	PT#
GPS MON	214296.002	1125124.594	122.84	15E14N
CIP / CONTROL POINT	214063.933	1123668.505	123.38	1
MW301S	214560.160	1124865.210	126.40	1574
INNER CASING	214560.546	1124865.178	126.00	1575
GROUND	214559.968	1124864.936	126.38	1576
MW301D	214562.161	1124880.995	126.33	1578
INNER CASING	214562.630	1124881.106	125.93	1579
GROUND	214561.885	1124881.124	126.32	1577
MW301I	214565.915	1124905.714	126.09	1580
INNER CASING	214566.352	1124906.082	125.56	1581
GROUND	214565.459	1124905.933	126.04	1582
MW305S	213411.314	1123930.003	116.49	1538
INNER CASING	213411.021	1123930.127	116.04	1539
GROUND	213409.185	1123930.184	116.52	1529
MW305D	213406.292	1123949.047	116.28	1534
INNER CASING	213405.975	1123949.183	115.94	1535
GROUND	213404.255	1123948.903	116.25	1531
MW305I	213408.673	1123939.648	116.43	1537
INNER CASING	213408.557	1123939.487	116.16	1536
GROUND	213406.936	1123939.665	116.38	1530
MW306S	213383.396	1124387.860	118.48	1552
INNER CASING	213383.550	1124387.814	117.82	1551
GROUND	213383.190	1124388.302	115.33	1550
MW306D	213381.032	1124409.879	118.62	1546
INNER CASING	213380.799	1124409.899	118.06	1545
GROUND	213380.768	1124410.251	115.59	1544

DESCRIPTION	GRID NORTH (US FT)	GRID EAST (US FT)	ELEV (US FT)	PT#
MW306I	213381.956	1124399.469	118.56	1548
INNER CASING	213382.124	1124399.458	117.76	1547
GROUND	213381.577	1124399.699	115.45	1549
MW307S	213350.889	1124902.305	114.58	1562
INNER CASING	213350.824	1124901.871	114.39	1563
GROUND	213351.290	1124900.960	114.59	1561
MW307D	213357.390	1124926.585	114.85	1568
INNER CASING	213357.307	1124926.918	114.42	1569
GROUND	213357.831	1124925.942	114.85	1567
GROOND	213337.031	1124323.542	114.00	1507
MW307I	213353.948	1124915.179	114.65	1565
INNER CASING	213353.775	1124914.838	114.16	1564
GROUND	213354.844	1124915.305	114.67	1566
MW308S	214978.217	1124909.927	131.58	1589
INNER CASING	214978.065	1124909.900	131.05	1588
GROUND	214977.778	1124910.412	128.586	1587
MW308D	214965.058	1124935.523	131.61	1595
INNER CASING	214965.082	1124935.463	130.98	1594
GROUND	214964.782	1124934.963	128.78	1593
MW308I	214972.536	1124923.282	131.51	4502
INNER CASING	214972.336	1124923.262	131.51	1592 1591
GROUND	214972.484	1124923.640		1591
GROUND	2149/2.2/6	1124925.040	128.58	1590
MW309S	215211.896	1124997.760	132.45	1602
INNER CASING	215212.060	1124997.916	131.77	1601
GROUND	215212.026	1124997.416	129.41	1600
8.81.42.00D	245200 227	4435030 364	122.14	1600
MW309D	215208.337	1125028.364	132.14	1608
INNER CASING	215208.441	1125028.421	131.52	1607
GROUND	215208.448	1125028.046	129.42	1606
MW309I	215209.976	1125016.064	132.36	1605
INNER CASING	215209.932	1125016.144	131.83	1604

DESCRIPTION	GRID NORTH (US FT)	GRID EAST (US FT)	ELEV (US FT)	PT#
SVE-107D	213936.763	1124748.817	115.77	1501
INNER CASING	213936.904	1124749.376	115.49	1502
GROUND	213935.960	1124748.782	115.70	1500
SVE-108D	213957.882	1124515.465	117.43	1504
INNER CASING	213957.528	1124515.629	117.01	1503
GROUND	213958.809	1124514.989	117.27	1505
SVE-109D	212076 646	1134344 040	117.04	4507
	213976.646	1124241.948	117.94	1507
INNER CASING	213976.388	1124242.354	117.49	1508
GROUND	213978.450	1124242.971	117.78	1506
CVE 440D	242004 044	4400000 404	447.04	4540
SVE-110D	213991.041	1123998.401	117.04	1510
INNER CASING	213990.593	1123998.498	116.36	1509
GROUND	213991.920	1123998.760	116.88	1511
SVE-111D	214044.084	1123802.414	122.59	1513
INNER CASING	214043.723	1123802.430	122.01	1514
GROUND	214045.635	1123802.456	122.39	1512

#### BANC3

#### Tetra Tech - Bethpage, NY

16 June 2011

INPUT Geographic, NAD83 OUTPUT

State Plane, NAD83 3104 - New York Long Island, U.S. Feet

15E14N (KU5039)

1/1

Latitude: 40 45 13.49016 Longitude: 073 29 29.50713

Northing/Y: 214296.001 Easting/X: 1125124.593

Convergence: 0 19 57.29260 Scale Factor: 0.999996308

# DERIVATION OF ORTHOMETRIC HEIGHT OF NATIONAL GEODETIC SURVEY MONUMENT 15E 14N (PID # KU5039)

"It is a straightforward procedure to algebraically subtract an interpolated geoid height, N, from a GPS ellipsoidal height, h, to obtain and orthometric height, H:

$$H = h - N''^1$$

#### For NGS Monument 15E 14N:

H = Orthometric Height (to be determined)

h = Ellipsoidal Height (6.331 meters) Adjusted 02/10/07

N = Geoid Height (-31.11 meters)

<u>or</u>

H = 6.331m - (-31.11m)

H = 37.441m (or 122.84 feet)

¹ Converting GPS Height into NAVD88 Elevation with the GEOID96 Geoid Height Model, Dennis G. Milbert, Ph.D. and Dru A. Smith, Ph.D., National Geodetic Survey, NOAA

#### The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
       National Geodetic Survey, Retrieval Date = FEBRUARY 14, 2012
KU5039 DESIGNATION - 15E 14N
KU5039 PID
              - KU5039
KU5039 STATE/COUNTY- NY/NASSAU
KU5039 USGS QUAD - HUNTINGTON (1979)
KU5039
KU5039
                              *CURRENT SURVEY CONTROL
KU5039
KU5039* NAD 83(2007) - 40 45 13.49016(N) 073 29 29.50713(W)
                                                                ADJUSTED
KU5039* NAVD 88 -
                       37.4
                                   (meters) 123. (feet) VERTCON
KU5039
KU5039 EPOCH DATE -
                            2002.00
                   - 1,374,891.931 (meters)
KU5039 X
                                                                COMP
                   - -4,639,038.874 (meters)
KU5039 Y
                                                                COMP
KU5039 Z
                  - 4,141,749.994 (meters)
                                                                COMP
KU5039 LAPLACE ÇORR-
KU5039 ELLIP HEIGHT-
                              4.02 (seconds)
                                                                DEFLEC09
                              6.331 (meters)
                                                     (02/10/07) ADJUSTED
KU5039 GEOID HEIGHT-
                           -31.11 (meters)
                                                                GEOID09
KU5039
KU5039
        ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
KU5039
       Type PID Designation North East Ellip
       KU5039
KU5039 NETWORK KU5039 15E 14N
                                                      1.29
                                                             1.12 2.78
KU5039
KU5039
KU5039. The horizontal coordinates were established by GPS observations
KU5039 and adjusted by the National Geodetic Survey in February 2007.
KU5039
KU5039. The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
KU5039. See National Readjustment for more information.
KU5039. The horizontal coordinates are valid at the epoch date displayed above
KU5039.which is a decimal equivalence of Year/Month/Day.
KU5039
KU5039. The NAVD 88 height was computed by applying the VERTCON shift value to
KU5039.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
KU5039
KU5039. The X, Y, and Z were computed from the position and the ellipsoidal ht.
KU5039. The Laplace correction was computed from DEFLEC09 derived deflections.
KU5039. The ellipsoidal height was determined by GPS observations
KU5039.and is referenced to NAD 83.
KU5039
KU5039. The gooid height was determined by GEOID09.
KU5039
KU5039;
                                       East Units Scale Factor Converg.
                         North
KU5039; SPC NY L - 65,317.552 342,938.662 MT 0.999999631 +0 19 57.3 KU5039; SPC NY L - 214,296.00 1,125,124.59 sFT 0.999999631 +0 19 57.3 KU5039; UTM 18 - 4,512,515.673 627,337.852 MT 0.99979958 +0 59 05.6
```

```
KU5039
   KU5039! - Elev Factor x Scale Factor = Combined Factor KU5039!SPC NY L - 0.99999901 x 0.99999631 = 0.99999532 KU5039!UTM 18 - 0.99999901 x 0.99979958 = 0.99979859
   KU5039

      KU5039:
      Primary Azimuth Mark

      KU5039:SPC NY L
      - 15E 14N AZ

      KU5039:UTM 18
      - 15E 14N AZ

                                                                                          Grid Az
                                                                                          093 49 50.7
                                                                                          093 10 42.4
   KU50391------
   KU5039| PID Reference Object
                                                             Distance Geod. Az |
   KU5039|
                                                                                           dddmmss.s
                                                        APPROX. 0.6 KM 0940948.0
   KU5039| KU5058 15E 14N AZ
   KU50391-----
   KU5039
   KU5039
                                              SUPERSEDED SURVEY CONTROL
   KU5039

      KU5039
      ELLIP H (12/03/02)
      6.339 (m)
      GP( ) 4 2

      KU5039
      NAD 83(1996) - 40 45 13.48989(N)
      073 29 29.50681(W) AD( ) 1

      KU5039
      ELLIP H (01/11/99)
      6.342 (m)
      GP( ) 4 1

      KU5039
      NAD 83(1996) - 40 45 13.48989(N)
      GP( ) 4 1

      KU5039
      NAD 83(1996) - 40 45 13.40505(N)
      GP( ) 4

      KU5039
      ELLIP H (01/11/99)
      6.342 (m)
      GP( ) 4

      KU5039
      NAD 83(1996) - 40 45 13.49288(N)
      073 29 29.50569(W) AD( ) 1

      KU5039
      NAD 83(1992) - 40 45 13.49274(N)
      073 29 29.50540(W) AD( ) 1

      KU5039
      NAD 83(1986) - 40 45 13.49343(N)
      073 29 29.50648(W) AD( ) 1

      KU5039
      NGVD 29 (03/24/92)
      37.8 (m)
      124. (f) GPS OBS

   KU5039
   KU5039. Superseded values are not recommended for survey control.
   KU5039.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
   KU5039. See file dsdata.txt to determine how the superseded data were derived.
   KU5039
   KU5039 U.S. NATIONAL GRID SPATIAL ADDRESS: 18TXL2733712515 (NAD 83)
   KU5039 MARKER: DO = NOT SPECIFIED OR SEE DESCRIPTION
   KU5039 SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)
   KU5039 SP SET: STAINLESS STEEL ROD IN SLEEVE
   KU5039 STAMPING: 15E14N
   KU5039 MARK LOGO: NYDPW
   KU5039 PROJECTION: RECESSED 8 CENTIMETERS
   KU5039 MAGNETIC: N = NO MAGNETIC MATERIAL
   KU5039 STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD
   KU5039+STABILITY: POSITION/ELEVATION WELL
   KU5039 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
   KU5039+SATELLITE: SATELLITE OBSERVATIONS - 1990
   KU5039 ROD/PIPE-DEPTH: 20.6 meters
   KU5039 SLEEVE-DEPTH : 1.52 meters
   KU5039
  KU5039 HISTORY - Date Condition
KU5039 HISTORY - 1990 MONUMENTED
                                                                  Report By
                                                                    SBAS
   KU5039
   KU5039
                                              STATION DESCRIPTION
   KU5039
   KU5039'DESCRIBED BY SIDNEY B BOWNE AND SON 1990
   KU5039'THE POINT IS LOCATED IN BETHPAGE, TOWN OF OYSTER BAY, 21 FEET (6.4 M)
   KU5039'SOUTH OF THE CENTERLINE OF SYCAMORE AVENUE AND 40 FEET (12.2 M) EAST
   KU5039'OF THE CENTERLINE OF NORTH 11TH STREET, IN THE CONCRETE SIDEWALK.
KU5039'THE LOCATION TIES ARE 42.5 FEET (13.0 M) FROM THE CENTER OF THE
   KU5039'HYDRANT, 48.6 FEET (14.8 M) FROM THE CENTER OF THE SEWER MANHOLE AND
   KU5039'33.8 FEET (10.3 M) FROM THE NORTH WEST CORNER OF HOUSE NUMBER 207.
   *** retrieval complete.
   Elapsed Time = 00:00:03
```

## Appendix C

**Chain of Custody Forms and Analytical Results** 

FORM NO. TINUS-001

19/19 11:00 8PS1 - SW3001 3001 - SW 6 7 3 2 1 1 - OL * NEW CARE	
SAMPLERS (SIGNATURE)	<i>. L</i>
CARRIERWAYBILL NUMBER    STANDARD TAT	
STANDARD TAT   RUSH TAT   72 hr.   7 day   14 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 day   19 da	Coures
STANDARD TAT   RUSH TAT   48 hr.   72 hr.   7 day   14 day   14 day   19 - 1	357 3
STANDARD TAT   RUSH TAT   48 hr.   72 hr.   7 day   14 day   14 day   19   19   19   19   19   19   19   1	/ /
RUSH TAT	
19-1  117 white  Cart 3  E-1/10398  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimental 10  Septimenta	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	MENTS
10/19 $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:30$ $11:3$	ane 24 H
10/19 $14:40$ $18951-17-180009-1520$ $1809$ $15'$ $20'$ $50$ $6$ $11$ $00$ $19/19$ $13:45$ $18951-17-18009-16:5$ $1809$ $10'$ $15'$ $150$ $10'$ $15'$ $150$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$ $10'$	une 34 H
10/19 $13:45$ $8751-77-mw309-10:15$ $3wy$ $20'$ $25'$ $30$ $6$ $1$ $    1$ $02$ $10/19$ $14:15$ $8751-77-mw309-10:15$ $3wy$ $10'$ $15'$ $50$ $6$ $1$ $    1$ $02$ $10/19$ $15:50$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$ $15/19$	
$10/19$ 14:15 BPSI-TI-MW309-10:5 $\frac{mw}{309}$ 10' 15' 30 6 1 1 02 $\frac{10/19}{19}$ 13:15 BPSI-TI-MW309-DO05 $\frac{mw}{309}$ 00' 05' 50 6 1 1 02 $\frac{10/19}{19}$ B:30 BPSI-TI-MW309-0510 $\frac{mw}{309}$ 05' 10' 50 6 1 1 $\frac{10/19}{19}$	
19/19 13:15 BPSI-TI-MW309-DDD5 13:49 00' 05' 50 6 1 1 02 19/19 13:30 BPSI-TI-MW309-D510 13:49 05' 10' 50 6 1 1 02 19/19 13:30 BPSI-TI-MW309-D510 13:49 05' 10' 50 6 1 1 02 19/19 13:30 BPSI-TI-MW309-D510 13:49 05' 10' 50 6 1 1 02 19/19 13:30 BPSI-TI-MW309-D510 13:49 05' 10' 50 6 1 1 02 19/19 13:30 BPSI-TI-MW309-D510 13:49 05' 10' 50 6 1 1 02 19/19 13:30 BPSI-TI-MW309-D510 13:49 05' 10' 50 6 1 1 02 19/19 13:30 BPSI-TI-MW309-D510 13:49 05' 10' 50 6 1 1 02 19/19 13:30 BPSI-TI-MW309-D510 13:49 05' 10' 50 6 1 1 02 19/19 13:30 BPSI-TI-MW309-D510 13:49 05' 10' 50 6 1 1 02 19/19 13:49 05' 10' 50 6 1 1 02	
19/9 B:30 BPSF-11-MW309-0510 309 05 10 50 6 1 1 02 Added	
. C Added	
	( ) 10/00
1. RELINQUISHED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1. RECEIVED BY 1.	TIME /ic:00
2. RELINQUISHED BY DATE TIME 2. RECEIVED BY DATE	TIME
3. RELINQUISHED BY DATE TIME 3. RECEIVED BY JOHNSON PRINCE TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLUTION TO SOLU	TIME // /5/05
COMMENTS  DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE)  YELLOW (FIELD COPY)  PINK (FILE COPY)	4/02F

PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MANAGER   PROJECT MA		AND CO	NAME	ATORY	LABOR			JMBER	IONE N	P	?	ANAGE	ECT M	PROJ		FACILITY:	<u>-</u>	ECT NO:	
SCONT) 412 551 2629 5560 Corporation of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the	ALT R.	x/w	TRI	MA	TRI	,4	210	<u>ا ما</u>	57	2 0		OK	B S	120		SITE! PCE	L230 GNATURE)	GO:	112 SAME
STANDARD TATX  RUSH TAT   48 hr.   72 hr.   7 day   14 day    O	E Exe. Cou	7490°	CORF	GO TATE	55(	79	262	551	12		IUMREE	JTI	CON	S					
STANDARD TAT X  RUSH TAT	MI. 4951	DS,	RAP		GRA		12	05	(G)(C)	5 59	3735	х <del>ч. «</del>	DE	FE					
TIME SAMPLE ID  TO 1200 BPS1-TB-01102012 TB — — QC G 2 2  No. OF CONTAINERS (GW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SO, SW, SW, SO, SW, SW, SW, SW, SW, SW, SW, SW, SW, SW	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		(b) (b) (c)	_/		ss (G)	or GLAS	TIC (P) ERVAT	PLAS PRES			o, oc,			4 day	72 hr. □ 7 day. □ 1		TAT $\square$	RUSH
10 1200 BPS1-TB-01102012 TB QC G 2 2 04 10 1500 BPS1-TT-MW3095-01102012 GW G 7 3 7 1 1 05		259)/	20		المحالية	D. K.	Nord)	OF AVAL		NTAINERS	ION METHOD	sw, so, sw, sı	ОЕРТН (FT)	H (FT)	_	raay a			ส
10 1200 BPSI-TB-01102012 TB QC G 2 2 04 04 10 1500 BPSI-TT-MW3095-01102012 GW G 7 3 7 1 1 05	Carty COMMENTS		J/!-	129	Y A		3/8/	2/2	7/2	No. OF CO	COLLECTI GRAB (G) COMP (C)	MATRIX (C ETC.)	воттом	TOP DEPT	LOCATION	SAMPLE ID		TIME	DATE YEAR _
10 1500 BPSI-TT-MW309S-01102012 GW G 7 3 2 1 1 05 10 1500 BPSI-TT-MW309S-01102012-F GW G 1			1						2	2	G	QC	_		TB	TB-01102012	BP51-7	1200	10
10 1500 BPSI-TT-MW3095-01102012-F GW G 1 GW G 1			95			1		2	3	7	G	GW		-	512	-MW3095-01102	BPSI-TT	1500	10
			06		ł	#				l	G	GW	~	_	ol2-F	-MW3095-01102	BPSI-TT-	1500	10
										<u>_</u>									
														<u> </u>					
RELINQUISHED BY  DATE  TIME  1. RECEIVED BY  DATE  DATE  DATE  TIME  2. RECEIVED BY  DATE	E TIME	DATE	1				×	BYE	CEIVED	1. R	ME SOO	I	)/i2	DATE		Dante			
RELINQUISHED BY DATE 2. RECEIVED BY DATE	E TIME	DATE				)		BY	CEIVED	2. R		T				0			
OMMENTS * CAU ROB SOK FOR TAT ANALYTE HEX Cr. ASAP.	1/12 TIME 084	DAT			11	W 21 -	X	TIN.	CEIVEC	3. R	ME	T		DATE			D BY		

ſ	R	_	E-1201 RATECH N	US, INC.	TM.	С	HAIN O				·	UMBER			1					:OF	49-2 —
			2230 GNATURE)	FACILI		В	KO	BS				HONE NO	618:	210		TRII	MATE	IAME /	AND CC	NTACT:	
		EKS (SI					S	CON	172	LEADER	1	HONE NI			1	ADDRES 556	ss O Co		•	COURT	
		O					FE	D E	X # <	NUMBER 673	, 5,5	5966	DE	31	- 1	CITY, ST		1) <i>qe</i>	s, 1	4I 495	้เว
	-											CONT	AINER	TYPE or GLA			6/0	2/	9/	2/2/	7/
	RUSH	DARD TA TAT  hr.	T. <b>⊵3</b> 48 hr. □ 7	72 hr. 📋	7 day	4 day			SD, QC,				ERVAT	_	/1		2/8		X XX	xx /	
	DATE ADIS	TIME		SAMPLE ID		LOCATIONED	тор бертн (FT)	ВОТТОМ DEPTH (FT)	MATRIX (GW, SO, SW, SD, ETC.)	COLLECTION METHOD GRAB (G)	No. OF CONTAINERS	THE	OF HAT	Som Som	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		/ /	/		8	NENTS
01 [	<b>Y</b>	880	BPSI-T	B-0111	2012	TB	_	_	QC	G	2	2		ĺ				34		TRIP BLA	
02	7/1	1000	BPS 1- TT-	MW309	1110-II	2012		~_	GW	G	7	3	2	1	1		1	05		Mw309:	
	۲,	1410	BPSI-TT-	MW30	10-0111	2012	-	_	GW	G	7	3	2	ı			(	05		MW 309	
04	٧.	1410	BPSI-TT	-MW3	9D-011	2012	F		GW	G	L					1		0		MW 309	
  -  -																		-			
  -  -																					
		INQUISH	, <b>%</b>	Con	α'		DATE	(12		ME 630	F	CEIVED	EX.						DAT		TIME
]		INQUISHE INQUISHE	_	<u>)                                    </u>			DATE			IME		CEIVED							DAT 927		TIME DOD
	COMM	ENTS	C.F		OB O		<u>'</u>		4A YELLOV	٧ (FIELD		511	ON	15		K (FILE (			1//	4/12	0 9 00 4/02R

PAGE OF OF **CHAIN OF CUSTODY** NUMBER PROJECT NO: FACILITY: PROJECT MANAGER LABORATORY NAME AND CONTACT: **PHONE NUMBER** NWIRP Bethpane 112602230 Rob Sok 757-466-4904 Wilt Koulebush SAMPLERS (SIGNATURE) FIELD OPERATIONS LEADER PHONE NUMBER ADDRESS Vince Shickora 5560 Corporate Exchange Court 610-909-1393 CARRIER/WAYBILL NUMBER CITY, STATE Grand Rapids MI 49512 FedEx 8729-3229-8874 CONTAINER TYPE PLASTIC (P) or GLASS (G) STANDARD TAT ပ္ပ **PRESERVATIVE** RUSH TAT **USED** ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day SD, COLLECTION METHOD GRAB (G) SW. ВОТТОМ DEPTH (FT) OF CONTAINERS राळ Meths (fer CE) TOP DEPTH (FT) MATRIX (GW, S ETC.) Zetowe ent LOCATION ID 2003/ DATE YEAR ġ COMMENTS TIME SAMPLE ID 1-16 0935 BPS1-TB01-01162012 ٦ 04 Lab prepared G 3 GW 1236 BPS1-TT-MW308D-0162012 07 1440 G 3 BPSI-TT-MW 308I-01162612 GW 2 07 7 G 1605 3 BPSI-TT-MW3085-01162012 GW 6 90 RUM MSMSM G BPS1-TT-MW301D-01172012 GW 3 0950 2 07 1050 BPSI-TT-MW305\$-01172012 GW 6 2 07 3 1-17 1140 BPSI-TT-MW 3015-01172012 GW 07 BPSI-TT-MW305I -01172012 H58 GW G 3 07 GW 7 3 BPS1-TT-MW301I-01172012 1305 J 05  $\bar{\mathbf{z}}$ G 1446 BPS1-TT-MW305D-01172012 GW 05 1515 BPS1-FW-MW02-01172012 3 GW 6 07 2 BPSI-Dup 01-01172012 3 09 1200 GW 1. RELINQUISHED BY 2. RELINQUISHED BY DATE 1-17-12 TIME 1720 1. RECEIVED BY Gel Bilet DATE TIME DATE TIME 2. RECEIVED BY DATE TIME 3. RELINQUISHED BY DATE DAJE/8-12 TIME 3. RECEIVED BY I COMMENTS

**CHAIN OF CUSTODY** 

NΩ

1168 | PAGE | OF | 11-2

9000d

	11:	IECT NO: ユムシスプ		FACILITY: NWIRP Beth	back		<i>&gt;b</i> ≤	NAGER			HONE NU	466-	490				NAME	AND CO	NTACT:	bush
	SAMF	-	GNATURE)		. 3	Vinc	e Sh	ckom	LEADER	4	ONE NI					0 0	. o. po	rate E	Exchange	Court SE
		4	who when						NUMBER		8680	)			CITY, S Grave	TATE	ids,	IM	49	612
		C									CONT	AINER TIC (P)	TYPE or GLA	.SS (G)		3	4	4/4	2/0	///
	RUSH	IDARD TA I TAT [] I hr. []		hr.	4 day			SD, QC,				ERVAT			W)	///	37	XV)	1/	
	DATE AGIZ	TIME		AMPLE ID	LOCATION ID	тор DЕРТН (FT)	ВОТТОМ DEPTH (FT)	MATRIX (GW, SO, SW, S ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	THE	OF AMALY	95/L	No like	e void	e de la la la la la la la la la la la la la			See See	COMMENTS
1	1-18	0300		2-01182012	-	_	-	QX	_	ユ	2						04			prepared
2	1-18	0816	BPSI- FBC	01-01182012	1	-	_	QC	-	2	نر،	2	١	1	1		10		Field B	Slank
3	1-18	0820	BPSI-RBC	01-01182012	Į		-	QC	-	8	3	2	١	1	1		11		Rinsate	Blank over
4	1-18	1042	BPSI-TT-	MW307D-0118201	7	-	ļ	GW	G	6	B	a	1				07			
5	1-18	1645	BPSI-TT-M	W304\$-01182612	-	-	_	GW	G	6	3	لم	1				07			
ما	-18	1225	BPSI-TT-M	W304II-01182012		_	_	GW	G	7	3	٦	ì	1/28	1		05			
7	1-18	1232	BPSI-TT-M	W307I-01182012	_	_	_	GW	G	7	3	J	1		İ	-	05			
8	-18	1400	BPSI-TT-M	W304I2-01182012		_	_	GW	6	7	3	Ja	1		1		05			
9	-18	1450		13078 01183012		_	-	GW	G	6	3	2	1				07			
Г	1-18	1600		~p02-0118-2012	-	_	_	Gω	G	7	3	2	Ì		١		12		Duplic	cate
											ļ	<u>-</u> .								
-																				
-	4 051	INCUING!	FD 507			5				T										
	I. KEL	INCUISH	ED BY	<u> </u>			8-20	12 1	TOO		CEIVED		\			1		DA		TIME
	2AREL	INQUISH	ED BA			DATE			IME		CEIVED							DAT		TIME
		INQUISH	ED BY			DATE		T	IME	3. RE	CEIVED	BY			- ( _	$\mathcal{K}$		DAT	E-19-12	. 17845
	COMM	MENTS	<del></del>										-						,	

Cart 4 33 TETRA TECH NUS, INC.	Rack #377G	E-120	1254
TETRA TECH NUS, INC.	CHAIN OF C	USTODY	NUMBER

	TE1	RA TECH NUS	S, INC.	C	HAIN O	F CUS	TODY		_   N	UMBER	· 1	10	1	134	1		PAGE		)F	13.5
11	JECT NO:	1230 IGNATURE)	FACILITY: NWIRP Betho	مهر	Ro	ь S	ANAGE	LEADE	_   ~	HONE N	466-	4904	,	Trix	1atri	NAME A	AND CO	NTACT:	debush	
	and the second	Bild	<i>[</i> -		Via	ier/W	hicker AYBILL	NUMBER	\ \( \( \lambda \)	HONE N らく く	09-1			CITY S	CO	•			ange Cour	156
	le	IA			Fed	5× 	87	29 7	3229		Z9 TAINER	TYPE		Grand		7	MI	495	12	
RUSI	IDARD TA	•	hr.	4 day			sb, ac,				ERVAT	IVE		NC)	3/	37	307	237		/
DATE YEAR	TIME	S	AMPLE ID	LOCATION ID	тор DEРТН (FT)	ВОТТОМ DЕРТН (FT)	MATRIX (GW, SO, SW, SD, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TIP	OF HAME	302	Of Section 1	ed to	We had	A COLOR	The Ore		COMMENTS	s
1-19	0745	BPSI-TBG	3-01192012	_	_	_	Qc		2	2							04	Lab	Preprine	
1-19	0917	BPSI-HN-ML	1291-01192012	_			GW	G	6	3	2			1			01		· ·	
1-19	0930	BPSI-FW-MA	21029110-101	_	_	_	GW	G	6	3	2	1					9		-	
1-19	1110	BPSI-FW-MU	203-0192012	_	_	_	GW	G	Će	3	2	1					07			
1-19	1117	BPSI-TT-ML	1304D-01192012	_	-	_	GW	G	6	3	a	1					07			
1-19	1307	BPSI-TT-MI	N303I2-01192012	_	_	~	GW	P	7	3	2	1			ì		05			
1-19	1415	BPSI-TT-MU	303TI-01192012	_	_	-	GW	G	7	3	2	١	١				13			-
1-19	1452	BPSI-TT-M	14330-0192012	_	_	_	GW	G	6	3	a	1					07	-		
1-19	1630	BPSI- Dupo	3-01192612	_	_	_	GW	G	4	3	7	1					ଅବ	Dupl	icate	
																		-		
	-								· · · · · · · · · · · · · · · · · · ·											
1. RE	JNQUISH	ED BX /4		<u> </u>	DATE 1-19		1	IME 1645	1. R	ECEIVE	BY			1			DAT	Έ	TIME	
2, REI	INQUISH	ED BY		<u> </u>	DATE	-14		IME IME	2. RI	ECEIVE	BY	$\rightarrow$			<del></del>		DAT	E	TIME	
3. RELINQUISHED BY					DATE		Т	IME	3. ŘI	ECEIVE	BY I	$\overline{}$		(-1)	1		DĄT	<u>50 12</u>	Z TIME	1/17
COMMENTS												<u> </u>			<u>L</u>		11:	<u> 20 · 12</u>	_ 1 08	47
L	VOLUEION																			

DISTRIBUTION:

5

WHITE (ACCOMPANIES SAMPLE)

YELLOW (FIELD COPY)

PINK (FILE COPY)

	E·1201287
Tt	TETRA TECH NUS, INC.

**CHAIN OF CUSTODY** 

NUMBER

Rack# 160 Blue Cart 2 15-7 1132 PAGE 1 OF 1 TM 1395

DDA	ECT NO:	FACILITY:		- BBO !	FOT M	ANIAGE		-	10015	11			<u>LOC</u>					
	2602	230 NUIRP Bett	honge		5 S	ANAGE	₹	P	HONE NI アクマース	MBER	6-40	104	Tr. M	atory latrix	NAME	AND CO	NTACT:	de bush
		GNATURE)	+ 3c	FIELD	OPER	ATIONS	LEADER	P	HONE N	<b>JMBER</b>			ADDRE	SS			, 450	ALE DWA
		_		V.	nce S	hicke	**	(	610-	909	189	3	556	s Co	non	to Es	ccharac	Court SE
	/	1811		CARR	IER/W	AYBILL	NUMBER						CITV C	TATE			•	
4	jul	Bull		F	ed E	× 2	3729.	322	9-82	30			Gra	nd R	apids	s, M	17 (	49512
	w	1 1							CONT	AINER TIC (P)	TYPE or GLA	.SS (G)		3	3/	9/0	2/	///
RUSH	DARD TA					, ac,				ERVAT			/5/	///	37	307	7	
1	inr.	48 hr.	4 day		_	, SE	ا و					$-\!\!\!/-$	<del>/</del>	/_	<del>**</del>	<del>,</del>	/	/-/-/
AR 2012			LOCATION ID	тор бертн (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.) COLLECTION METHOD GRAB (G) COMP (C) No. OF CONTAINERS  No. OF CONTAINERS								Selection COMMENTS					
DATE	TIME	SAMPLE ID	Ž	Ď	B0	MA]	0.80	Š	//	3/4	0/4	30/1	(3)°	1	4/			COMMENTS
102	0730	BPS1-TB04-01202012		_	_	Qc	_	2	2			Ĺ	ĺ	04				prepared
1	0920	BPS1-TT-MW3025-01202012	_	-	_	GW	G	6	3	2	1			07				F -1
1-20	1000	BPSI-TT-MW302D-01202012	_	_	-	GW	G	6	3	2		1		01				
1-20	1045	BPS1-TT-MW30211-01202012	_	_	-	GW	G	6	3	a	1			40				
1-20	1115	BPSI-TT-MW302I2-0120301	<b>\</b> -	~	-	GW	G	6	3	ス	1			07				
					<u></u>													
	_																	
	INQUISH	240	1	DATE	0-12	1	IME 400	1. R	ECEIVED	BY			1			DAT	E	TIME
2 KELINQUISHED BY							IME	2. R	ECEIVED	ВУ						DAT	E	TIME
3. RELINQUISHED BY						T	IME	3. R	ECEIVE	ВУ		mi	4 /	Pille	triv	DAT 1/2	E//.3	TIME 0845
COMM	IENTS					•	·			X	1			· ·	• • • • • • • • • • • • • • • • • • •		7.0~	

TEGGGG

**CHAIN OF CUSTODY** 

NUMBER

Rack # 12, 77 Cart 9
2674 white PAGE 1 OF 1

	112	ECT NO:	30	FACILITY: NWIRP Beth		Ko	ڪ طد	NAGER			ONE NU	MBER 466-	4904	1	ABORA	ATORY I	NAME A	ND CO	NTACT:	bush	<del></del>
	SAMP	LERS (SI	GNATURE)		3,				LEADER		ONE NU				ADDRES						
		71	15/			Vin	<u>ce 5</u>	Shick	Koi/a		210-9	<u> </u>	ष्टि		5560	5 C	ogne	rate	Excha	مود که	atse
	9	-	201						UMBER		3229-8841				Grand Rapids, MI 49512						
		Kal				red	Ex	<u> </u>	144.	- 2×.			•		سي لهدلا	3 K	x pids	<b>S</b>	\ <b>_</b>	1751	<u>م</u>
	CTAN	DARD TA	T 152									AINER TIC (P)	TYPE or GLAS	SS (G)	$ \angle $		4/ c	3/0	2/ 4	<u>/</u> /	
	RUSH	TAT 🔲		hr.	4 day			SD, QC,	_		PRES USED	ERVATI	VE		***/	1/:	27/2	1/	Zigu /		
	DATE COLZ				LOCATION ID	тор бертн (ғт)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	THE	S HALL	\$ 257	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			Private		[3]	COMMENT	<b>S</b>
Ol		TIME 0730		ample ID 05-01232012		_	=	<b>Q</b> C	-	プ	2				<b>Y</b>		04			·	
02	1-23			1625 D-01332013			_	GW	G	9	3	2	1		3		<u> </u>		Lab	prepare	<u>a</u>
_	1-23		<del></del>	M3034-01232012		_	_	GW	G	6	3	الم	1				07				
	1-23	1210	<del>                                     </del>	W306I-01232012		_	_	GW	6	18	7	6	i	1	3		15		RUA MS	MSD o	N Toc
	1-23	1230		M301D-01232012		-	_	GW	G	1			•	1			و (		EDETYTI	mile exce	pr 10c
	123		<del>                                     </del>	02-01232012	~	_	_	QC	_	7	3	2	1	i			17		Rins	Je B	lank
			BPSI-TT-M	1W3069-01232012	_		_	GW	G	10	3	ر ک	١	i	3		DIE	19		<u></u>	
			† · · · · · · · · · · · · · · · · · · ·	2-01232012		-	_	QC.	_	7	3	2	1	1			18		Source	e Blan	k
09	1-23	1600	BPSI- Dup	04-01232012			-	GW	G	6	3	2	1				09				
										•											
																			_		
							<b></b>	<del> </del>											-		
	1. REI	INOUISH	IED BY	//		DATE	3-1	٦٦	İME	1. RE	CEIVE	) BY			<u> </u>	1 .		DA	TE.	TIME	
	2.REI	INQUISH	IED BY	7		DATE	- <del></del>	T	IME	2. RE	CEIVE	BY		)				DA	TE	TIME	
	3. REL	INQUISH	IED BY	,		DATE		T	IME	3. RE	CEIVE	BY	- 76	<i></i>		Trill	Matri	DA	1/24/1	TIME	845
	COMM	ENTS				<del></del>							1	July	70.	_1=14,1	um	<i>7</i> _1_/	<del>, , , , , , , , , , , , , , , , , , , </del>	<del>-</del> 1	

01 02 03

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-03

File ID: <u>1201254-03.D</u>

Sampled: 01/19/12 09:30

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 15:09

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	ı	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	บ
75-15-0	Carbon Disulfide	ı	0.50	0.19	0.50	5.0	บ
56-23-5	Carbon Tetrachloride	ı	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	ับ
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	I	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	0.1	บ
95-50-1	1,2-Dichlorobenzene	ı	0.50	0.15	0.50	1.0	บ
541-73-I	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	3.1	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	ı	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	70	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	J
78-87 <b>-</b> 5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	. 1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	υ
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	l	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

 Matrix:
 Ground Water
 Laboratory ID:
 1201254-03
 File ID:
 1201254-03.D

 Sampled:
 01/19/12 09:30
 Prepared:
 01/24/12 08:00
 Analyzed:
 01/24/12 15:09

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	230	0.16	0.50	1.0	E
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	I	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	8.3	0.14	0.50	1.0	
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	21	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	I	1.2	0.22	0.50	1.0	
75-01-4	Vinyl Chloride	I	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	Ŭ
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	ับ

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.3	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	40.0	100	85 - 120	
4-Bromofluorobenzene	40.0	37.7	94	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	524227	5.13	88	5.13	
Chlorobenzene-d5	490570	8.08	89	8.08	
1,4-Dichlorobenzene-d4	259473	10.38	81	10.38	

^{*} Values outside of QC limits

#### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

SDG: 50063-13 Laboratory: TriMatrix Laboratories, Inc.

Sampled: 01/19/12 09:30

Project: NWIRP Bethpage, NY 01-CTO WE44(04) Client: TETRA TECH NUS - Pittsburgh

Matrix: Ground Water Laboratory ID: <u>1201254-03RE1</u> File ID: <u>1201254-03D.D</u> Analyzed: 01/26/12 16:36 Prepared: 01/26/12 08:00

Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL Solids:

Sequence: 2A26019 Calibration: 2A18010 Instrument: 224 QC Batch: 1201663

CAS No.	Analyte /	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	2_	2.0	1.3	2.0	20	U
71-43-2	Benzene	2	1.0	0.23	1.0	2.0	Ŭ
74-97-5	Bromochloromethane	2	1.0	0.31	1.0	2.0	บ
75-27-4	Bromodichloromethane	2	1.0	0.27	1.0	2.0	U
75-25-2	Bromoform	2	0.50	0.20	0.50	2.0	U
74-83-9	Bromomethane	2	1.0	0.56	1.0	2.0	U
75-15-0	Carbon Disulfide	2	1.0	0.37	1.0	10	U
56-23-5	Carbon Tetrachloride	2	1.0	0.29	1.0	2.0	U
108-90-7	Chlorobenzene	2	1.0	0.26	1.0	2.0	Ü
75-00-3	Chloroethane	2	1.0	0.30	1.0	2.0	U
67-66-3	Chloroform	2	1.0	0.32	1.0	2.0	U
74-87-3	Chloromethane	2	1.0	0.36	1.0	2.0	U
110-82-7	Cyclohexane	2	1.0	0.58	1.0	10	Ū
96-12-8	1,2-Dibromo-3-chloropropane	2	1.0	0.50	1.0	4.0	U
124-48-1	Dibromochloromethane	2	0.50	0.19	0.50	2.0	U
106-93-4	1,2-Dibromoethane	2	0.50	0.21	0.50	2.0	U
95-50-1	1,2-Dichlorobenzene	2	1.0	0.31	1.0	2.0	U
541-73-1	1,3-Dichlorobenzene	2	0.50	0.21	0.50	2.0	U
106-46-7	1,4-Dichlorobenzene	2	1.0	0.31	1.0	2.0	U
75-71-8	Dichlorodifluoromethane	2	1.0	0.50	1.0	2.0	U
75-34-3	1,1-Dichloroethane	2	3.0	0.39	1.0	2.0	
107-06-2	1,2-Dichloroethane	2	1.0	0.24	1.0	2.0	U
75-35-4	1,1-Dichloroethene	2	1.0	0.35	1.0	2.0	U
156-59-2	cis-1,2-Dichloroethene	2	64	0.34	1.0	2.0	
156-60-5	trans-1,2-Dichloroethene	2	1.0	0.23	1.0	2.0	บ
78-87-5	1,2-Dichloropropane	2	1.0	0.29	1.0	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2	0.20	0.10	0.20	2.0	U
10061-02-6	trans-1,3-Dichloropropene	2	0.50	0.22	0.50	2.0	U
123-91-1	1,4-Dioxane	2	50	20	50	100	U
100-41-4	Ethylbenzene .	2	0.50	0.21	0.50	2.0	U
591-78-6	2-Hexanone	2	1.0	0.48	1.0	10	U
98-82-8	Isopropylbenzene	2	1.0	0.34	1.0	2.0	U
79-20-9	Methyl Acetate	2	1.0	0.55	1.0	10	U
1634-04-4	Methyl tert-Butyl Ether	2	1.0	0.26	1.0	2.0	U
108-87-2	Methylcyclohexane	2	1.0	0.47	1.0	10	ט
75-09-2	Methylene Chloride	2	1.0	0.69	1.0	2.0	U
78-93-3	2-Butanone (MEK)	2	1.0	0.56	1.0	10	U U

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-03RE1</u>

File ID: 1201254-03D.D

Sampled: 01/19/12 09:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 16:36

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	2	1.0	0.47	1.0	10	U
100-42-5	Styrene	2	0.20	0.11	0.20	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2	1.0	0.24	1.0	2.0	Ū
127-18-4	Tetrachloroethene	2	(200)	0.33	1.0	2.0	
108-88-3	Toluene	2	0.20	0.11	0.20	2.0	Ü
87-61-6	1,2,3-Trichlorobenzene	2	1.0	0.28	1.0	4.0	U
120-82-1	1,2,4-Trichlorobenzene	2	1.0	0.29	1.0	. 4.0	U
71-55-6	1,1,1-Trichloroethane	2	7.8	0.29	1.0	2.0	
79-00-5	1,1,2-Trichloroethane	2	1.0	0.30	1.0	2.0	U
79-01-6	Trichloroethene	2	20	0.37	1.0	2.0	
75-69-4	Trichlorofluoromethane	2	1.0	0.36	1.0	2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	2	1.0	0.45	1.0	2.0	J
75-01-4	Vinyl Chloride	2	1.0	0.48	1.0	2.0	U
179601-23-1	Xylene, Meta + Para	2	1.0	0.57	1.0	4.0	U
95-47-6	Xylene, Ortho	2	0.50	0.21	0.50	2.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	· · · · · · · · · · · · · · · · · · ·
4-Bromofluorobenzene	40.0	38.6	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	493663	5.13	93	5.13	
Chlorobenzene-d5	472107	8.08	93	8.08	
1,4-Dichlorobenzene-d4	254308	10.38	86	10.38	

^{*} Values outside of QC limits

#### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-03</u>

File ID: <u>A87_039-0</u>

Sampled: 01/19/12 09:30

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 00:55

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	ı	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	ı	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	Ü
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.196	97	40 - 135	
Tetrachloro-m-xylene	0.202	0.169	84	36 - 114	

^{*} Values outside of QC limits

#### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-03RE1</u>

File ID: <u>A87 372-0</u>

Sampled: 01/19/12 09:30

Prepared: 01/23/12_11:22

Analyzed: 02/07/12 02:18

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	[	0.46	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.192	95	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

^{*} Values outside of QC limits

## INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-03</u>

Sampled: 01/19/12 09:30

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	ÐL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	860	ug/L	8.1	10	20		01/30/12 14:25

_____ Page 2 of 20

### INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-03</u>

Sampled: 01/19/12 09:30

Prepared: <u>01/27/12 07:00</u>

Solids: <u>0.00</u>

Preparation: 3020A Digestion

Initial/Final: 25 mL / 25 mL

QC Batch: <u>1201622</u>

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	roo	Q	Analyzed
7440-47-3	Chromium, Total	1	4.4	ug/L	0.20	0.50	1.0		01/31/12 16:08

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-11</u>

File ID: 1201218-11.D

Sampled: 01/17/12 15:15

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 13:46

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

QC Batch:	<u>1201603</u> Sequence:	ZAZ3006	Cantilation	n: <u>2A18010</u>	ın	•	
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	ı	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	ı	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	บ
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	l	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	Ū
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1 1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene		0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	l	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	<del>                                     </del>	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	<del>                                     </del>	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	<u> </u>	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane		0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1 1	0.10	0.050	0.10	1.0	U
10061-02-6		1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	i	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	l l	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	<u> </u>	0.35	0.13	0.50	1.0	J
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	τ
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	Ţ
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	τ

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-11

File ID: 1201218-11.D

Sampled: 01/17/12 15:15

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 13:46

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	21	0.16	0.50	1.0	
108-88-3	Toluene	<u> </u>	0.10	0.057	0.10	1.0	U
	1,2,3-Trichlorobenzene	<u>-</u> 1	0.50	0.14	0.50	2.0	U
87-61-6 120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
	1,1,1-Trichloroethane	1	0.39	0.14	0.50	1.0	J
71-55-6	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-00-5	Trichloroethene	1	2.7	0.18	0.50	1.0	
79-01-6		1	0.50	0.18	0.50	1.0	U
75-69-4 76-13-1	Trichlorofluoromethane 1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.36	0.22	0.50	1.0	J
/0-13-1	ane						<u> </u>
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.0	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	530321	5.13	89	5.13	
Chlorobenzene-d5	499909	8.08	, 90	8.08	
1,4-Dichlorobenzene-d4	268517	10.38	84	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-11</u>

File ID: <u>A87 022-0</u>

Sampled: 01/17/12 15:15

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 18:02

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q	
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	ับ	
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U	
11141-16-5	PCB-1232	l	0.080	0.041	0.080	0.20	U	
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U	
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U	
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U	
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U	
11100-14-4	PCB-1268	ı	0.080	0.040	0.080	0.20	U	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.184	91	40 - 135	
Tetrachloro-m-xylene	0.202	0.161	80	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-11RE1</u>

File ID: <u>A87 179-0</u>

Sampled: 01/17/12 15:15

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 17:30

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201461

Sequence: 2B01038

Calibration: 2B01011

[	CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
١	12672-29-6	PCB-1248	1	0.30	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.188	93	40 - 135	
Tetrachloro-m-xylene	0.202	0.167	83	36 - 114	

^{*} Values outside of QC limits

## INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-11

Sampled: 01/17/12 15:15

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	l	8.5	ug/L	0.20	0.50	1.0		01/31/12 15:36

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-11

Sampled: 01/17/12 15:15

Prepared: <u>01/23/12 07:00</u>

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	330	ug/L	8.1	10	20		01/30/12 12:46

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-04</u>

File ID: <u>1201254-04.D</u>

Sampled: 01/19/12 11:10

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 15:37

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	i	0.50	0.12	0.50	1.0	Ü
74-97 <b>-</b> 5	Bromochloromethane	l	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	I	0.50	0.19	0.50	5.0	Ŭ
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	ı	0.50	0.13	0.50	1.0	υ
75-00-3	Chloroethane	Ĺ	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	Ŭ
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	Ū
541-73-1	1,3-Dichlorobenzene	l	0.25	0.11	0.25	1.0	Ū
106-46-7	1,4-Dichlorobenzene	ı	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	J	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	ı	0.50	0.19	0.50	1.0	Ū
107-06-2	1,2-Dichloroethane		0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.49	0.17	0.50	1.0	J
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	I	0.25	0.11	0.25	0.1	Ū
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	ı	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	Ü
1634-04-4	Methyl tert-Butyl Ether	!	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	I	0.50	0.35	0.50	1.0	Ū
78-93-3	2-Butanone (MEK)	]	0.50	0.28	0.50	5.0	Ū

#### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-04

File ID: 1201254-04.D

Sampled: 01/19/12 11:10

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 15:37

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	68	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.25	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	ı	0.50	0.15	0.50	1.0	Ū
79-01-6	Trichloroethene	1	3.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	Ü
75-01-4	Vinyl Chloride		0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	I	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.4	101	70 - 120	
Toluene-d8	40.0	40.6	102	85 - 120	
4-Bromofluorobenzene	40.0	37.7	94	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	525475	5.13	88	5.13	
Chlorobenzene-d5	499629	8.08	, 90	8.08	
1,4-Dichlorobenzene-d4	262518	10.38	82	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-04

File ID: A87 040-0

Sampled: 01/19/12 11:10

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 01:19

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: <u>2B06048</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	<u> </u>	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	ı	0.080	0.080	0.080	0.20	บ
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.152	75	40 - 135	
Tetrachloro-m-xylene	0.202	0.131	65	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-04RE1</u>

File ID: A87 374-0

Sampled: 01/19/12 11:10

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 03:07

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.9	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.189	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.152	75	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-04

Sampled: 01/19/12 11:10

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	110	ug/L	8.1	10	20		01/30/12 14:29

_____ Page 3 of 20

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-04

Sampled: 01/19/12 11:10

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: <u>3020A Digestion</u>

QC Batch: <u>1201622</u>

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.6	ug/L	0.20	0.50	1.0		01/31/12 16:10

#### BPS1-HN-MW29I-01192012

Analyzed: 01/24/12 14:42

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

SDG: 50063-13 Laboratory: TriMatrix Laboratories, Inc.

Sampled: 01/19/12 09:17

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

File ID: 1201254-02.D Laboratory ID: <u>1201254-02</u> Matrix: Ground Water

Prepared: 01/24/12 08:00 Initial/Final: 5 mL/5 mL Preparation: 5030B Aqueous Purge & Solids:

Instrument: 224 Sequence: <u>2A25008</u> Calibration: 2A18010 QC Batch: 1201603

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	l	0.50	0.12	0.50	1.0	Ŭ
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	ı	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	I	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	i	0.25	0.11	0.25	1.0	Ü
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	I,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	Ü
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	ı	0.50	0.15 '	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	Ū
10061-02-6	trans-1,3-Dichloropropene	j	0.25	0.11	0.25	1.0	υ
123-91-1	1,4-Dioxane	ı	25	10	25	50	υ
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	υ
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	I	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	τ

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Sequence: <u>2A25008</u>

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-02</u>

File ID: 1201254-02.D

Sampled: 01/19/12 09:17

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 14:42

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: <u>1201603</u>

rieparation. Jusub At

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOĐ	rog	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1.1.2.2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.49	0.16	0.50	1.0	J
108-88-3	Toluene	l	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	i	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	i	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	I	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	I	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	บ
75-01-4	Vinyl Chloride	i	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	Ü
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.5	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	511183	5.13	86	5.13	
Chlorobenzene-d5	481292	8.08	, 87	8.08	
1,4-Dichlorobenzene-d4	257465	10.38	80	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-02</u>

File ID: A87 038-0

Sampled: 01/19/12 09:17

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 00:31

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	rod	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	ı	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.191	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.131	65	36 - 114	

^{*} Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-02RE1</u>

File ID: <u>A87_371-0</u>

Sampled: 01/19/12 09:17

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 01:54

Solids:

Preparation: 3510C Liquid-Liquid Ext

u I...

Calibration: 2B09014

Initial/Final: 990 mL/2 mL

QC Batch: <u>1201518</u>

Sequence: 2B09039

and and and and

	CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
i	12672-29-6	PCB-1248	1	0.63	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.185	91	40 - 135	
Tetrachloro-m-xylene	0.202	0.126	62	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-02</u>

Sampled: 01/19/12 09:17

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-70-2	Calcium, Total	j	24000	ug/L	230	500	500		01/30/12 14:21
7439-89-6	Iron, Total	1	83	ug/L	8.1	10	20		01/30/12 14:21
7440-23-5	Sodium, Total	1	7800	ug/L	130	500	500		01/30/12 14:21

_____ Page 1 of 20

### INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-02</u>

Sampled: 01/19/12 09:17

Prepared: <u>01/27/12 07:00</u>

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.5	ug/L	0.20	0.50	1.0		01/31/12 16:07

# ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-Dup03-01192012

BPSI-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-09

File ID: <u>1201254-09.D</u>

Sampled: 01/19/12 16:30

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

OC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	Ū
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	ı	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	Ŭ
56-23-5	Carbon Tetrachloride	i	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	i	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	I	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	i	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	L
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	τ

Page 19 of 46

# ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-Dup03-01192012

BPSI-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-09</u>

File ID: 1201254-09.D

Sampled: 01/19/12 16:30

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	<u> </u>
100-42-5	Styrene	l	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	บ
127-18-4	Tetrachloroethene	1	0.46	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U.
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene		0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-00-3	Trichloroethene	<u> </u>	0.50	0.18	0.50	1.0	Ū
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	I	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	-
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	527482	5.13	88	5.13	
Chlorobenzene-d5	495899	8.08	, 90	8.08	
1,4-Dichlorobenzene-d4	264783	10.38	82	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-Dup03-01192012

BPSI-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-09

File ID: <u>A87_045-0</u>

Sampled: 01/19/12 16:30

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 03:20

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: <u>2B06048</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	I	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.196	97	40 - 135	
Tetrachloro-m-xylene	0.202	0.178	88	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-Dup03-01192012

BPSI-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-09RE1</u>

File ID: A87_385-0

Sampled: 01/19/12 16:30

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 07:34

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201518

Sequence: <u>2B09039</u>

Calibration: 2B09014

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	rod	Q
12672-29-6	PCB-1248	1	0.66	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.195	96	40 - 135	
Tetrachloro-m-xylene	0.202	0.176	87	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-Dup03-01192012

BPSI-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-09</u>

Sampled: 01/19/12 16:30

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	93	ug/L	8.1	10	20		01/30/12 14:58

_____ Page 9 of 20

### INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-Dup03-01192012

BPSI-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-09

Sampled: 01/19/12 16:30

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

QC Batch: 1201622

Preparation: 3020A Digestion

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.2	ug/L	0.20	0.50	1.0		01/31/12 16:15

#### BPS1-TT-MW301S-01172012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-07 File ID: 1201218-07.D

Sampled: 01/17/12 11:40 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 13:46

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: <u>1201552</u> Sequence: <u>2A24017</u> Calibration: <u>2A18010</u> Instrument: <u>224</u>

<b>4</b> = =	QC Batch: 1201332 Sequence: 2A24017			m. ZAIOUIU	•	instrument: <u>224</u>			
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q		
67-64-1	Acetone	1	1.0	0.66	1.0	10	U		
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U		
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U		
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U		
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U		
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U		
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U		
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	บ		
108-90-7	Chlorobenzene	ı	0.50	0.13	0.50	1.0	Ū		
75-00-3	Chloroethane	i	0.50	0.15	0.50	1.0	Ū		
67-66-3	Chloroform	ı	0.50	0.16	0.50	1.0	Ū		
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U		
110-82-7	Cyclohexane	1	0.50	0.29	0,50	5.0	U		
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U		
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U		
106-93-4	1,2-Dibromoethane	ı	0.25	0.11	0.25	1.0	U		
95-50-1	1,2-Dichlorobenzene	ı	0.50	0.15	0.50	1.0	U		
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U		
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	Ū		
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U		
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U		
107-06-2	1,2-Dichloroethane	ı	0.50	0.12	0.50	1.0	U		
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	ប		
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	Ū		
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U		
78-87-5	1,2-Dichloropropane	ı	0.50	0.15	0.50	1.0	Ū		
10061-01-5	cis-1,3-Dichloropropene	ı	0.10	0.050	0.10	1.0	U		
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	ប		
123-91-1	1,4-Dioxane	ı	25	10	25	50	U		
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U		
591-78-6	2-Hexanone	1 .	0.50	0.24	0.50	5.0	Ų		
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U		
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U		
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U		
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U		
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U		
78-93-3	2-Butanone (MEK)	i	0.50	0.28	0.50	5.0	Ū		

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-07

File ID: <u>1201218-07.D</u>

Sampled: <u>01/17/12 11:40</u>

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 13:46

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

_ _ . . _ _

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34 <b>-</b> 5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	Ū
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	Ū
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	Ū
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	Ū
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	Ü
79-01 <b>-</b> 6	Trichloroethene	1	0.50	0.18	0.50	1.0	Ū
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	Ü
75-01-4	Vinyl Chloride	J	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.3	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.3	103	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	561816	5.13	93	5.13	
Chlorobenzene-d5	537929	8.08	· 94	8.08	<del></del>
1,4-Dichlorobenzene-d4	296519	10.38	87	10.38	

^{*} Values outside of QC limits

_____Page 24 of 56

## ORGANIC ANALYSIS DATA SHEET USEPA-8082

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-07</u>

File ID: <u>A87 016-0</u>

Sampled: 01/17/12 11:40

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 15:37

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	บ

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.182	89	40 - 135	
Tetrachloro-m-xylene	0.204	0.174	86	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-07RE1</u>

File ID: <u>A87 172-0</u>

Sampled: 01/17/12 11:40

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 14:40

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201461

Sequence: 2B02020

Calibration: 2B02004

10.500 00 0 000 000	LOQ	LOD	DL	CONC. (ug/L)	<b>"</b> "	Ditute	Analyte	CAS No.
12672-29-6 PCB-1248 V 10 V 10 0.54 0.80 2.0	2.0	0.80	0.54	10	$\prod$	10	PCB-1248	12672-29-6

^{*} Values outside of QC limits

### **INORGANIC ANALYSIS DATA SHEET** USEPA-6010C

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-07

Sampled: 01/17/12 11:40

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	I	56	ug/L	8.1	10	20		01/30/12 12:30

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-07

Sampled: 01/17/12 11:40

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.5	ug/L	0.20	0.50	1.0		01/31/12 15:29

____Page 11 of 27

### BPS1-TT-MW301I-01172012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Client: <u>TETRA TECH NUS - Pittsburgh</u>

Laboratory ID: 1201218-09

File ID: 1201218-09.D

Matrix: Ground Water
Sampled: 01/17/12 13:05

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 13:19

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

SDG: 50063-12

QC Daten	. <u>1201003</u> Sequence			ii. <u>ZA10010</u>		istrument. <u>ZZ</u>	_
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	Ū
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	ប
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	υ
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	I	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	0.1	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	i	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	I	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	l	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	I	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	l	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	I	0.25	0.11	0.25	1.0	U
123-91-1	I,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	I	0.25	0.11	0.25	1.0	U
591-78 <b>-</b> 6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	l	0.50	0.17	0.50	1.0	Ŭ
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	ט
78-93-3	2-Butanone (MEK)	ı	0.50	0.28	0.50	5.0	Ü

### BPS1-TT-MW301I-01172012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-09

File ID: <u>1201218-09.D</u>

Sampled: 01/17/12 13:05

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 13:19

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	ប
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	l	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	ı	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	l	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	Ū
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.4	101	85 - 120	
4-Bromofluorobenzene	40.0	38.5	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	516158	5.13	86	5.13	
Chlorobenzene-d5	479498	8.08	. 87	8.08	
1,4-Dichlorobenzene-d4	259720	10.38	81	10.38	

^{*} Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET USEPA-8082

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-09

File ID: A87 018-0

Sampled: 01/17/12 13:05

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 16:25

Solids:

QC Batch: 1201461

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

Solius.

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	L	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.185	92	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-09RE1</u>

File ID: A87 175-0

Sampled: 01/17/12 13:05

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 15:53

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

Sequence: <u>2B01016</u> QC Batch: 1201461

Calibration: 2B01003

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.79	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.190	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.159	79	36 - 114	

^{*} Values outside of QC limits

### INORGANIC ANALYSIS DATA SHEET . USEPA-6010C

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-09

Sampled: 01/17/12 13:05

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	17	ug/L	8.1	10	20	J	01/30/12 12:38

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-09

Sampled: 01/17/12 13:05 Prepared: 01/20/12 05:30

Solids: <u>0.00</u> Preparation: <u>3020A Digestion</u>

QC Batch: 1201434 Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	7.0	ug/L	0.20	0.50	1.0		01/31/12 15:34

### **INORGANIC ANALYSIS DATA SHEET USEPA-7196A**

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-09

Sampled: 01/17/12 13:05

Prepared: 01/18/12 10:14

Solids: <u>0.00</u>

QC Batch: 1201614

Preparation: Method-Specific Preparation

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	rog	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	ı	5.3	ug/L	0.3	1.0	1.0		01/18/12 10:40

### BPS1-TT-MW301D-01172012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-05</u>

File ID: <u>1201218-05.D</u>

Sampled: 01/17/12 09:50

Prepared: <u>01/23/12 08:00</u>

Analyzed: 01/23/12 12:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: <u>1201552</u>

Sequence: <u>2A24017</u>

Calibration: 2A18010

QC Batch	: <u>1201332</u> Sequence:	<u>ZP1Z4017</u>	Cantilatio	n: <u>ZA18010</u>	Instrument: <u>224</u>				
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q		
67-64-1	Acetone	1	1.0	0.66	1.0	10	Ü		
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U		
74-97-5	Bromochloromethane	I .	0.50	0.16	0.50	1.0	U		
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U		
75-25-2	Bromoform	l l	0.25	0.10	0.25	1.0	U		
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U		
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	Ü		
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U		
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U		
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U		
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U		
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U		
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U		
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U		
124-48-1	Dibromochloromethane	I	0.25	0.094	0.25	1.0	U		
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U		
95-50-1	1,2-Dichlorobenzene	I	0.50	0.15	0.50	1.0	U		
541-73-1	1,3-Dichlorobenzene	I	0.25	0.11	0.25	1.0	U		
106-46-7	1,4-Dichlorobenzene	f	0.50	0.16	0.50	1.0	U		
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U		
75-34-3	1,1-Dichloroethane	1	0.22	0.19	0.50	1.0	J		
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U		
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	บ		
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U		
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	0.1	U		
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U		
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U		
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U		
123-91-1	1,4-Dioxane	1	25	10	25	50	U		
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U		
591-78-6	2-Hexanone	<u>I</u>	0.50	0.24	0.50	5.0	U		
98-82-8	Isopropylbenzene	ı	0.50	0.17	0.50	1.0	U		
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U		
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U		
108-87-2	Methylcyclohexane	ı	0.50	0.23	0.50	5.0	U		
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U		
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	Ū		

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-05</u>

File ID: <u>1201218-05.D</u>

Sampled: 01/17/12 09:50

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 12:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	0.1	Ū
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	Ū
127-18-4	Tetrachloroethene	1	0.26	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.14	0.057	0.10	1.0	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	ı	0.53	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane		0.50	0.15	0.50	1.0	Ū
79-01-6	Trichloroethene	J	2.6	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	ı	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	j	0.50	0.22	0.50	1.0	บ
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.9	102	85 - 115	•
1,2-Dichloroethane-d4	40.0	39.5	99	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	567161	5.13	94	5.13	
Chlorobenzene-d5	534103	8.08	· 93	8.08	
1,4-Dichlorobenzene-d4	295193	10.38	87	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-05

File ID: <u>A87_014-0</u>

Sampled: 01/17/12 09:50

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 14:48

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q U	
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20		
11104-28-2	11104-28-2 PCB-1221 I		0.080	0.045	0.080	0.20	υ	
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U	
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U	
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U	
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U	
37324-23-5	PCB-1262	CB-1262 1		0.080	0.080	0.20	U	
11100-14-4	1100-14-4 PCB-1268 I		0.080	0.040	0.080	0.20	U	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.177	87	40 - 135	
Tetrachloro-m-xylene	0.204	0.154	75	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-05REI</u>

File ID: <u>A87 170-0</u>

Sampled: 01/17/12 09:50

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 13:52

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201461

Sequence: <u>2B01016</u>

Calibration: 2B01003

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.75	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.190	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.167	82	36 - 114	

^{*} Values outside of QC limits

### INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-05</u>

Sampled: 01/17/12 09:50

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	14	ug/L	8.1	10	20	J	01/30/12 12:21

### **INORGANIC ANALYSIS DATA SHEET** USEPA-6020A

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-05

Sampled: 01/17/12 09:50

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

QC Batch: 1201434

Preparation: 3020A Digestion Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	ļ	92	ug/L	0.20	0.50	1.0		01/31/12 15:27

### INORGANIC ANALYSIS DATA SHEET USEPA-7196A

BPS1-TT-MW301D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-05</u>

Sampled: 01/23/12 12:30

Prepared: 01/24/12 10:38

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: <u>1201753</u>

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL.	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	5	86.0	ug/L,	1.5	5.0	5.0		01/24/12 11:25

### BPS1-TT-MW302S-01202012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201287-02</u>

File ID: <u>1201287-02.D</u>

Sampled: 01/20/12 09:20

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 12:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: <u>1201663</u>

Sequence: <u>2A26019</u>

Calibration: 2A18010

QC Batch: 1201605 Seque		2A20019		n: <u>2A16010</u>		<u>*</u>	
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	ı	0.25	0.10	0.25	1.0	Ü
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	l	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	ı	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	ı	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	ı	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	ı	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	ı	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene		0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	ı	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15 '	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	I	0.10	0.050	0.10	1.0	υ
10061-02-6	trans-1,3-Dichloropropene	ľ	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	l	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	บ
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	!	0.50	0.28	0.50	5.0	U

### BPS1-TT-MW302S-01202012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201287-02</u>

File ID: 1201287-02.D

Sampled: 01/20/12 09:20

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 12:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10 <b>-1</b>	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	I	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	]	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	Ü
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	i	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	0.1	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	Ŭ
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	ı	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	ı	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.5	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.4	99	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.6	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	514821	5.13	97	5.13	
Chlorobenzene-d5	484007	8.08	. 95	8.08	
1,4-Dichlorobenzene-d4	261639	10.38	89	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201287-02 File ID: A87 082-0

Sampled: 01/20/12 09:20 Prepared: 01/25/12 08:27 Analyzed: 01/26/12 21:18

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 960 mL/2 mL

QC Batch: <u>1201593</u> Sequence: <u>2B03015</u> Calibration: <u>2A20001</u> Instrument: <u>144</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	υ
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.208	100	40 - 135	
Tetrachloro-m-xylene	0.208	0.176	85	36 - 114	

^{*} Values outside of QC limits

BPS1-TT-MW302S-01202012

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201287-02RE1</u>

File ID: A87 281-0

Sampled: 01/20/12 09:20

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 02:03

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 960 mL / 2 mL

QC Batch: 1201593

Sequence: <u>2B03005</u>

Calibration: 2B03001

CAS No. Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6 PCB-1248	1	0.43	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.193	93	40 - 135	
Tetrachloro-m-xylene	0.208	0.167	80	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201287-02</u>

Sampled: 01/20/12 09:20

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	22	ug/L	8.1	10	20		01/30/12 15:02

### INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-02

Sampled: 01/20/12 09:20

Prepared: 01/27/12 07:00

Solids: <u>0.00</u> QC Batch: 1201622 Preparation: 3020A Digestion

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.63	ug/L	0.20	0.50	1.0	J	01/31/12 16:21

Page 10 of 20

### BPS1-TT-MW302I1-01202012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-04

File ID: 1201287-04.D

Sampled: 01/20/12 10:45

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 13:22

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	!	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	Ū
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	Ŭ
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	i	0.25	0.11	0.25	1.0	Ū
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	Ü
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	i	0.45	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	υ
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	Ū
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	i	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	Ü
75-09-2	Methylene Chloride	]	0.50	0.35	0.50	1.0	Ū
78-93-3	2-Butanone (MEK)	1 1	0.50	0.28	0.50	5.0	U

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-04

File ID: 1201287-04.D

Sampled: <u>01/20/12 10:45</u>

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 13:22

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	l	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	ı	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	ĺ	0.29	0.16	0.50	1.0	J
108-88-3	Toluene	ı	0.10	0.057	0.10	1.0	Ū
87-61-6	1,2,3-Trichlorobenzene		0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	I	0.35	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	I	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	}	0.50	0.22	0.50	1.0	Ū
75-01-4	Vinyl Chloride	I	0.50	0.24	0.50	1.0	Ŭ
179601-23-1	Xylene, Meta + Para	l	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	0.1	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.0	100	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	492765	5.13	93	5.13	
Chlorobenzene-d5	466376	8.08	92	8.08	
1,4-Dichlorobenzene-d4	251538	10.38	85	10.38	

^{*} Values outside of QC limits

### BPS1-TT-MW302I1-01202012

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-04

File ID: A87_084-0

Sampled: 01/20/12 10:45

Prepared: <u>01/25/12 08:27</u>

Analyzed: 01/26/12 22:07

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL / 2 mL

QC Batch: 1201593

Sequence: <u>2B03015</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.209	102	40 - 135	
Tetrachloro-m-xylene	0.204	0.156	77	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201287-04RE1</u>

File ID: <u>A87 283-0</u>

Sampled: 01/20/12 10:45

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 02:51

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201593

Sequence: <u>2B03005</u>

Calibration: 2B03001

CAS No. Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6 PCB-12	.8	1.2	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.191	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.150	73	36 - 114	· · · · · · · · · · · · · · · · · · ·

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-04

Sampled: 01/20/12 10:45

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	-	34	ug/L	8.1	10	20		01/30/12 15:10

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW30211-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201287-04</u>

Sampled: 01/20/12 10:45

Prepared: <u>01/27/12 07:00</u>

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.4	ug/L	0.20	0.50	0.1		01/31/12 16:23

### BPS1-TT-MW302I2-01202012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-05

File ID: <u>1201287-05.D</u>

Sampled: 01/20/12 11:15

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 13:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	ı	1.0	0.66	1.0	10	U
71-43-2	Benzene	I	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	Ŭ
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	Ū
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	l	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	I	0.50	0.13	0.50	1.0	Ú
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	Ü
74-87 <b>-</b> 3	Chloromethane	1	0.50	0.18	0.50	1.0	Ŭ
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	<u>l</u>	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	ı	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0,50	0.12	0.50	1.0	Ŭ
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	Ü
156-59-2	cis-1,2-Dichloroethene	I	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	l	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15 '	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	11.0	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	ប
79-20-9	Methyl Acetate	I	0.50	0.27	0.50	5.0	Ŭ
1634-04-4	Methyl tert-Butyl Ether	I	0.50	0.13	0.50	0.1	Ü
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	Ū
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-05

File ID: 1201287-05.D

Sampled: 01/20/12 11:15

Prepared: 01/26/12 08:00

Analyzed: <u>01/26/12 13:50</u>

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	υ
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	Ĭ	0.50	0.12	0.50	0.1	U
127-18-4	Tetrachloroethene	]	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	j	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	ı	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	I	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	39.8	99	70 - 120	
Toluene-d8	40.0	40.9	102	85 - 120	
4-Bromofluorobenzene	40.0	38.1	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	496718	5.13	94	5.13	
Chlorobenzene-d5	470247	8.08	93	8.08	_
1,4-Dichlorobenzene-d4	255582	10.38	87	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-05

File ID: A87_085-0

Sampled: 01/20/12 11:15

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 22:31

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201593

Sequence: <u>2B03015</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	บ
37324-23-5	PCB-1262	l l	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	บ

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.208	103	40 - 135	
Tetrachloro-m-xylene	0.202	0.163	81	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201287-05RE1</u>

File ID: A87_285-0

Sampled: 01/20/12 11:15

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 03:40

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

Instrument: 144

QC Batch: 1201593

Sequence: 2B03005

Calibration: 2B03001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.9	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.200	99	40 - 135	
Tetrachloro-m-xylene	0.202	0.154	76	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-05

Sampled: 01/20/12 11:15 Prepared: 01/27/12 07:00

Solids: 0.00 Preparation: 3010A Digestion

QC Batch: 1201621 Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	rog	Q	Analyzed
7439-89-6	Iron, Total	1	59	ug/L	8.1	10	20		01/30/12 15:14

Page 13 of 20

### INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201287-05</u>

Sampled: 01/20/12 11:15

Prepared: 01/27/12 07:00

Solids: <u>0.00</u> QC Batch: <u>1201622</u> Preparation: 3020A Digestion

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.1	ug/L	0.20	0.50	1.0		01/31/12 16:24

### BPS1-TT-MW302D-01202012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-03

File ID: 1201287-03.D

Sampled: 01/20/12 10:00 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 12:55

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: <u>1201663</u> Sequence: <u>2A26019</u> Calibration: <u>2A18010</u> Instrument: <u>224</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	ı	1.0	0.66	1.0	10	Ū
71-43-2	Benzene	I	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	l	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	I	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	I	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	Ū
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	I	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	<u> </u>	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	ប
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	ប
541-73-1	1,3-Dichlorobenzene	I	0.25	0.11	0.25	1.0	Ū
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	I	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.62	0.17	0.50	1.0	J
156-59-2	cis-1,2-Dichloroethene	l	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	I	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	Ü
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Initial/Final: 5 mL/5 mL

Matrix: Ground Water

Laboratory ID: 1201287-03

File ID: 1201287-03.D

Sampled: 01/20/12 10:00

Prepared: 01/26/12 08:00

Analyzed: 01/26/12_12:55

Solids:

Preparation: 5030B Aqueous Purge &

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	Ü
79-34-5	1,1,2,2-Tetrachloroethane	i	0.50	0.12	0.50	1.0	ับ
127-18-4	Tetrachloroethene	1	0.33	0.16	0.50	1.0	J
108-88-3	Toluene		0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	Ŭ
71-55-6	1,1,1-Trichloroethane	1	0.23	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	3.9	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.0	97	70 - 120	
Toluene-d8	40.0	40.5	101	85 - 120	
4-Bromofluorobenzene	40.0	38.5	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	504030	5.13	95	5.13	
Chlorobenzene-d5	470972	8.08	93	8.08	
1,4-Dichlorobenzene-d4	253629	10.38	86	10.38	

^{*} Values outside of QC limits

#### BPS1-TT-MW302D-01202012

#### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-03

File ID: <u>A87_083-0</u>

Sampled: 01/20/12 10:00

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 21:42

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 960 mL/2 mL

QC Batch: 1201593

Sequence: <u>2B03015</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	l	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	ı	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	<u>I</u>	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	Ü
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	ı	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	l l	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.211	101	40 - 135	
Tetrachloro-m-xylene	0.208	0.163	78	36 - 114	

^{*} Values outside of QC limits

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-03RE1

File ID: A87 282-0

Sampled: 01/20/12 10:00

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 02:27

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 960 mL/2 mL

QC Batch: <u>1201593</u>

Sequence: <u>2B03005</u>

Calibration: 2B03001

L	CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOO	0	1
	12672-29-6	PCB-1248	1	0.85	0.054	0.080	0.20		

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.192	92	40 - 135	
Tetrachloro-m-xylene	0.208	0.153	73	36 - 114	<u> </u>

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201287-03</u>

Sampled: <u>01/20/12 10:00</u>

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621 Initial/Fina

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dii. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-70-2	Calcium, Total	1	8000	ug/L	230	500	500		01/30/12 15:06
7439-89-6	Iron, Total	l	75	ug/L	1.8	10	20		01/30/12 15:06
7440-23-5	Sodium, Total	1	24000	ug/L	130	500	500		01/30/12 15:06

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201287-03</u>

Sampled: 01/20/12 10:00

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q_	Analyzed
7440-47-3	Chromium, Total	1	2.3	ug/L	0.20	0.50	1.0		01/31/12 16:22

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-03</u>

File ID: <u>1201310-03.D</u>

Sampled: 01/23/12 10:49

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 14:45

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

OC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	I	1.0	0.66	1.0	10	U
71-43-2	Веплепе	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	l	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	ı	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	I	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	0.1	U
108-90-7	Chlorobenzene	i	0.50	0.13	0.50	1.0	Ŭ
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	Ŭ
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	i	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	ī	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	i	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	ı	0.25	0.11	0.25	1.0	บ
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	l	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	ับ

#### BPS1-TT-MW303S-01232012

#### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-03

File ID: 1201310-03.D

Sampled: 01/23/12 10:49

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 14:45

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	J	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	Ü
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.9	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	l	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	Ū
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.6	99	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.5	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	507152	5.13	96	5.13	
Chlorobenzene-d5	475239	8.08	94	8.08	
1,4-Dichlorobenzene-d4	257292	10.38	87	10.38	

^{*} Values outside of QC limits

#### BPS1-TT-MW303S-01232012

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-03

File ID: A87 087-0

Sampled: 01/23/12 10:49

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 23:19

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	ı	0.080	0.041	0.080	0.20	ប
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254		0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.208	103	40 - 135	
Tetrachloro-m-xylene	0.202	0.152	75	36 - 114	

^{*} Values outside of QC limits

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201310-03RE1</u>

File ID: <u>A87 289-0</u>

Sampled: 01/23/12 10:49

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 05:17

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: <u>2B07033</u>

Calibration: 2B03001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.21	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.189	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.143	71	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-03

Sampled: 01/23/12 10:49

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	66	ug/L	8.1	10	20	_	01/30/12 15:30

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-03</u>

Sampled: 01/23/12 10:49

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: <u>1201622</u>

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.7	ug/L	0.20	0.50	1.0		01/31/12 16:26

BPS1-Dup04-01232012

BPS1-TT-MW3035

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-09

File ID: <u>1201310-09.D</u>

Sampled: 01/23/12 16:00

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 16:08

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

QC Batch	QC Batch: <u>1201663</u> Sequence: <u>22</u>		Calibratio	Instrument: 224			
CAS No.	Analyte	Dilution	CONC. (ug/L)	ÐL	LOD	LOQ	Q
67-64-1	Acetone		1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	Ū
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	0.1	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	l l	0.50	0.14	0.50	1.0	Ū
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	Ü
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	Ü
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	Ü
124-48-1	Dibromochloromethane	ı	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	I	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	Ū
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	J	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	0.1	Ū
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0,50	1.0	U
75-35-4	1,1-Dichloroethene	ı	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78 <b>-87-</b> 5	1,2-Dichloropropane	I	0.50	0.15	0.50	1.0	Ū
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	I	0.25	0.11	0.25	0.1	U
123-91-1	1,4-Dioxane	ı	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	Ū
79-20-9	Methyl Acetate	l	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	Ū
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

BPS1-Dup04-01232012

BPSI-TT-MW3035'

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-09

File ID: 1201310-09.D

Sampled: 01/23/12 16:00

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 16:08

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	Ū
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.8	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	Ū
75-01-4	Vinyl Chloride	I	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	Ū
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	40.9	102	85 - 120	
4-Bromofluorobenzene	40.0	37.9	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	484017	5.13	91	5.13	
Chlorobenzene-d5	461266	8.08	94	8.08	
1,4-Dichlorobenzene-d4	247962	10.38	84	10.38	

^{*} Values outside of QC limits

BPS1-Dup04-01232012

13 PS1-797-MW303,5

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201310-09</u>

File ID: A87_094-0

Sampled: 01/23/12 16:00

Prepared: 01/25/12 08:27

Analyzed: 01/27/12 02:09

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201593

Sequence: <u>2B03015</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	i	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	υ

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.209	103	40 - 135	
Tetrachloro-m-xylene	0.202	0.171	85	36 - 114	

^{*} Values outside of QC limits

BPS1-Dup04-01232012

BPSI-TT-MW3035

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-09REI

File ID: A87 294-0

Sampled: 01/23/12 16:00

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 07:18

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B07033

Calibration: 2B03001

	CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
Ī	12672-29-6	PCB-1248	1	0.20	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.193	96	40 - 135	
Tetrachloro-m-xylene	0.202	0.164	81	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-Dup04-01232012

13PS1-TT-MW303\$

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-09

Sampled: 01/23/12 16:00

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	l	210	ug/L	8.1	10	20		01/30/12 16:07

__ _ _ _ Page 20 of 20

BPS1-Dup04-01232012

BPS1-TT-MW3035

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-09</u>

Sampled: 01/23/12 16:00

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	ì	4.2	ug/L	0.20	0.50	1.0		01/31/12 16:42

#### BPS1-TT-MW303I1-01192012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-07

File ID: <u>1201254-07.D</u>

Sampled: 01/19/12 14:15

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:00

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	ı	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	I	0.50	0.13	0.50	1.0	Ü
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	Ŭ
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	Ū
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	Ŭ
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	ı	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane		0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	l	1.6	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	I	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	1.6	0.17	0.50	1.0	
156-59-2	cis-1,2-Dichloroethene	1	2.0	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene		0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	J	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	ı	0.50	0.24	0.50	5.0	U
98-82-8	lsopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	i	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	ı	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	I	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

#### BPS1-TT-MW303I1-01192012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-07

File ID: <u>1201254-07.D</u>

Sampled: 01/19/12 14:15

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:00

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	ı	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	Ŭ
127-18-4	Tetrachloroethene	1	83	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	I	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	บ
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	18	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	Í	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	ı	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.0	95	75 - 120	<u> </u>

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	514906	5.13	86	5.13	
Chlorobenzene-d5	488654	8.08	88	8.08	
1,4-Dichlorobenzene-d4	259158	10.38	81	10.38	

^{*} Values outside of QC limits

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-07</u>

File ID: A87_043-0

Sampled: 01/19/12 14:15

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 02:32

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL/2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.195	94	40 - 135	·
Tetrachloro-m-xylene	0.206	0.173	84	36 - 114	

^{*} Values outside of QC limits

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-07RE1

File ID: AFEB010-0

Sampled: 01/19/12 14:15

Prepared: 01/23/12 11:22

Analyzed: 02/09/12 14:22

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL / 2 mL

QC Batch: 1201518

Sequence: <u>2B09057</u>

Calibration: 2B09015

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	3	3.9	0.19	0.24	0.60	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.225	10 <del>9</del>	40 - 135	· · · · · · · · · · · · · · · · · · ·
Tetrachloro-m-xylene	0.206	0.192	93	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-07</u>

Sampled: 01/19/12 14:15

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	6000	ug/L	8.1	10	20		01/30/12 14:49

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-07</u>

Sampled: 01/19/12 14:15

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: General Metals Prep

QC Batch: 1201623

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	70	ug/L	8.1	10	20		01/30/12 16:31

_____ Page 7 of 20

BPS1-TT-MW30311-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-07</u>

Sampled: 01/19/12 14:15

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.8	ug/L	0.20	0.50	1.0		01/31/12 16:13

BPS1-TT-MW30311-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-07

Sampled: 01/19/12 14:15

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: General Metals Prep

Initial/Final: 25 mL/25 mL QC Batch: <u>1201624</u>

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.23	ug/L	0.20	0.50	1.0	J	01/31/12 15:08

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

 Matrix: Ground Water
 Laboratory ID: 1201254-06
 File ID: 1201254-06.D

 Sampled: 01/19/12 13:07
 Prepared: 01/24/12 08:00
 Analyzed: 01/24/12 16:32

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: <u>1201603</u> Sequence: <u>2A25008</u> Calibration: <u>2A18010</u> Instrument: <u>224</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	Ū
71-43-2	Benzene	1	0.50	0.12	0.50	0.1	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	I	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	i	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	I I	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	I	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87 <b>-</b> 3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	υ
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	I	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	I	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87 <b>-</b> 5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	Ü
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	Ŭ
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

#### BPS1-TT-MW303I2-01192012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-06

File ID: 1201254-06.D

Sampled: 01/19/12 13:07

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 16:32

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	l	0.50	0.23	0.50	5.0	Ū
100-42-5	Styrene	I	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	I	0.50	0.12	0.50	1.0	Ū
127-18-4	Tetrachloroethene	1	0.94	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	บ
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	Ü
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene		1.6	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	]	0.50	0.22	0.50	1.0	Ū
75-01-4	Vinyl Chloride	l	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.4	101	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.1	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	510032	5.13	86	5.13	
Chlorobenzene-d5	480629	8.08	· 87	8.08	
1,4-Dichlorobenzene-d4	259640	10.38	81	10.38	

^{*} Values outside of QC limits

#### BPS1-TT-MW303I2-01192012

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-06

File ID: A87 042-0

Sampled: 01/19/12 13:07

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 02:08

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL/2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	ı	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	ı	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.215	104	40 - 135	
Tetrachloro-m-xylene	0.206	0.180	87	36 - 114	

, ~57<del>7.6</del>4

^{*} Values outside of QC limits

BPS1-TT-MW30312-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-06RE1</u>

File ID: <u>A87 378-0</u>

Sampled: 01/19/12 13:07

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 04:44

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL/2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	2.4	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.214	104	40 - 135	
Tetrachloro-m-xylene	0.206	0.179	87	36 - 114	

^{*} Values outside of QC limits

### **INORGANIC ANALYSIS DATA SHEET** USEPA-6010C

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-06

Sampled: 01/19/12 13:07

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	69	ug/L	8.1	10	20		01/30/12 14:45

BPS1-TT-MW30312-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-06</u>

Sampled: 01/19/12 13:07

Prepared: <u>01/27/12 07:00</u>

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622 Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.4	ug/L	0.20	0.50	1.0		01/31/12 16:12

### **INORGANIC ANALYSIS DATA SHEET USEPA-7196A**

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-06</u>

Sampled: 01/19/12 13:07

Prepared: 01/20/12 10:46

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201627

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	J	1,0	ug/L	0.3	1.0	1.0	ប	01/20/12 11:15

#### BPS1-TT-MW303D-01192012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-08</u>

File ID: <u>1201254-08.D</u>

Sampled: 01/19/12 14:52

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:28

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

Q0 D				Denotation: 22110010 Institution: 22			
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	Ŭ
71-43-2	Benzene	ı	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane		0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	บ
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	บ
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	. ប
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	Ū
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	l	0.50	0.18	0.50	0.1	U
110-82-7	Cyclohexane	J ,	0.50	0.29	0.50	5.0	Ū
96-12-8	1,2-Dibromo-3-chloropropane	I	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	I	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	ı	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	Ü
107-06-2	1,2-Dichloroethane	I	0.50	0.12	0.50	1.0	Ŭ
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0,50	1.0	U
156-59-2	cis-1,2-Dichloroethene	l	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	ī	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	ı	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	Ŭ
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	Ū
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	Ū
1634-04-4	Methyl tert-Butyl Ether	i	0.50	0.13	0.50	1.0	Ū
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09 <b>-</b> 2	Methylene Chloride	1	0.50	0.35	0.50	1.0	Ū
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

#### BPS1-TT-MW303D-01192012

#### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-08</u>

File ID: <u>1201254-08.D</u>

Sampled: 01/19/12 14:52

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:28

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	l	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	I	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	i	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	I	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane		0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	i	0.51	0.18	0.50	0.1	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	I	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	l	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	530402	5.13	89	5.13	
Chlorobenzene-d5	497230	8.08	. 90	8.08	
1,4-Dichlorobenzene-d4	266672	10.38	83	10.38	

^{*} Values outside of QC limits

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-08

File ID: A87_044-0

Sampled: 01/19/12 14:52

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 02:56

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 940 mL / 2 mL

QC Batch: 1201518

Sequence: <u>2B06048</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.085	0.057	0.085	0.21	U
11104-28-2	PCB-1221	1	0.085	0.048	0.085	0.21	U
11141-16-5	PCB-1232	1	0.085	0.044	0.085	0.21	U
12672-29-6	PCB-1248	1	0.085	0.058	0.085	0.21	U
11097-69-1	PCB-1254	1	0.085	0.057	0.085	0.21	U
11096-82-5	PCB-1260	1	0.085	0.031	0.085	0.21	υ
37324-23-5	PCB-1262	1	0.085	0.085	0.085	0.21	U
11100-14-4	PCB-1268	1	0.085	0.042	0.085	0.21	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.213	0.210	99	40 - 135	***************************************
Tetrachloro-m-xylene	0.213	0.181	85	36 - 114	

^{*} Values outside of QC limits

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-08RE1</u>

File ID: <u>A87 384-0</u>

Sampled: 01/19/12 14:52

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 07:10

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 940 mL / 2 mL

QC Batch: 1201518

Sequence: 2B09045

Calibration: 2B09015

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	2	1.6	0.13	0.17	0.43	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.213	0.213	100	40 - 135	****
Tetrachloro-m-xylene	0.213	0.186	88	36 - 114	

^{*} Values outside of QC limits

### INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-08</u>

Sampled: 01/19/12 14:52

Prepared: 01/27/12 07:00

SDG: 50063-13

Solids: <u>0.00</u>

QC Batch: 1201621

Preparation: 3010A Digestion Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	520	ug/L	8.1	10	20		01/30/12 14:54

### **INORGANIC ANALYSIS DATA SHEET** USEPA-6020A

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-08</u>

Sampled: 01/19/12 14:52

Prepared: <u>01/27/12 07:00</u>

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.3	ug/L	0.20	0.50	1.0		01/31/12 16:14

#### BPS1-TT-MW304S-01182012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-05 File ID: 1201244-05.D

Sampled: 01/18/12 10:45 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 12:23

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	ı	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	I	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1,0	U
108-90-7	Chlorobenzene	I	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	I	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1 .	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	Ü
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	0.1	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	ı	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

#### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-05</u>

File ID: 1201244-05.D

Sampled: 01/18/12 10:45

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 12:23

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	I	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane		0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	ı	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene		0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	ı	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	530181	5.13	89	5.13	
Chlorobenzene-d5	493846	8.08	. 89	8.08	
1,4-Dichlorobenzene-d4	269552	10.38	84	10.38	·····

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-05

File ID: <u>A87 027-0</u>

Sampled: 01/18/12 10:45

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 20:04

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL/2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	i	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.205	99	40 - 135	
Tetrachloro-m-xylene	0.206	0.167	81	36 - 114	

^{*} Values outside of QC limits

### **INORGANIC ANALYSIS DATA SHEET** USEPA-6010C

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-05</u>

Sampled: 01/18/12 10:45

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	iron, Total	1	58	ug/L	8.1	10	20	<u>-</u>	01/30/12 13:14

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-05</u>

Sampled: 01/18/12 10:45

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.4	ug/L	0.20	0.50	1.0		01/31/12 15:42

Page 22 of 27

#### BPS1-TT-MW304I1-01182012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-06</u>

File ID: <u>1201244-06.D</u>

Sampled: 01/18/12 12:25

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 16:59

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

OC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

	A . 1	Dilution	CONC (ng/L)	DL	LOD	LOQ	Q
CAS No.	Analyte	Dilution	CONC. (ug/L)	0.66	1.0	10	U
67-64-1	Acetone	1	1.0		0.50	1.0	บ
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	<u>U</u>
74-97-5	Bromochloromethane	1	0.50	0.16		1.0	<del>U</del>
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50		<del>U</del>
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	บ
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	<del>U</del>
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	I	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	1.6	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	6.0	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87 <b>-</b> 5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	ט
10061-01-5	cis-1,3-Dichloropropene	i	0.10	0.050	0.10	1.0	υ
10061-02-6	trans-1,3-Dichloropropene	ī	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	ı	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	ı	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	τ
75-09-2	Methylene Chloride		0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	ι

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-06

File ID: 1201244-06.D

Sampled: 01/18/12 12:25

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 16:59

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	Ī	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	25	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	Ū
71-55-6	1,1,1-Trichloroethane	1	1.7	0.14	0.50	1.0	
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	4.1	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	Ŭ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.0	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.7	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	550781	5.13	91	5.13	
Chlorobenzene-d5	528117	8.08	. 92	8.08	
1,4-Dichlorobenzene-d4	290850	10.38	86	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-06

File ID: A87 028-0

Sampled: 01/18/12 12:25

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 20:28

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	j	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	J	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260		0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.194	95	40 - 135	
Tetrachloro-m-xylene	0.204	0.161	79	36 - 114	

^{*} Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET USEPA-8082

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201244-06RE1</u>

File ID: <u>A87 277-0</u>

Sampled: 01/18/12 12:25

Prepared: 01/23/12 11:04

Analyzed: 02/03/12 00:26

Solids:

Preparation: 3510C Liquid-Liquid Ext

ı İni

Initial/Final: 980 mL / 2 mL

QC Batch: <u>1201461</u>

Sequence: <u>2B03005</u>

Calibration: 2B03001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.97	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.190	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.161	79	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-06

Sampled: 01/18/12 12:25

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	400	ug/L	8.1	10	20		01/30/12 13:18

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-06</u>

Sampled: 01/18/12 12:25

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	]	38	ug/L	0.20	0.50	1.0		01/31/12 15:43

### INORGANIC ANALYSIS DATA SHEET USEPA-7196A

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-06

Sampled: 01/18/12 12:25

Prepared: 01/19/12 10:34

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201625

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	2	35.5	ug/L	0.6	2.0	2.0		01/19/12 11:23

#### BPS1-TTMW-304I2-01182012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-08 File ID: 1201244-08.D

Sampled: 01/18/12 14:00 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 17:55

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: <u>1201552</u> Sequence: <u>2A24017</u> Calibration: <u>2A18010</u> Instrument: <u>224</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	ı	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	I	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	บ
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	Ŭ
541-73-1	1,3-Dichlorobenzene	l	0.25	0.11	0.25	1.0	Ü
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	i	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	I	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	ı	2.7	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	ı	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	lsopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-08</u>

File ID: <u>1201244-08.D</u>

Sampled: 01/18/12 14:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 17:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	Ü
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	Ü
79-34-5	1,1,2,2-Tetrachloroethane	I	0.50	0.12	0.50	0.1	U
127-18-4	Tetrachloroethene	1	5.5	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	บ
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.26	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	ı	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	ı	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	39.0	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	532905	5.13	88	5.13	
Chlorobenzene-d5	512136	8.08	, 89	8.08	
1,4-Dichlorobenzene-d4	285184	10.38	84	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201244-08</u>

File ID: A87_032-0

Sampled: 01/18/12 14:00

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 22:05

Solids:

Preparation: 3510C Liquid-Liquid Ext

Calibration: 2A20001

Initial/Final: 990 mL/2 mL

QC Batch:	<u>1201461</u>	Sequence: <u>2A31043</u>	Calibratio	Iı	Instrument: 144		
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11097-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262		0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.178	88	40 - 135	
Tetrachloro-m-xylene	0.202	0.152	75	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-08RE1

File ID: A87 239-0

Sampled: 01/18/12 14:00

Prepared: 01/23/12 11:04

Analyzed: 02/01/12 17:28

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL/2 mL

QC Batch: 1201461

Sequence: 2B02024

Calibration: 2B01011

								1
CAS No.	Analyte /	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q	
12672-29-6	PCB-1248	2	1.5	0.11	0.16	0.40		
	<u> </u>							

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.160	79	40 - 135	
Tetrachloro-m-xylene	0.202	0.137	68	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

mmc 3116/12

SDG: 50063-12

TT- MW30412-BPS1-TFMW-30412-01182012

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-08

Sampled: 01/18/12 14:00

Prepared: 01/31/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201437 Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	16	ug/L	1.8	10	20	J	02/01/12 10:34

____Page 25 of 27

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW304I2-BPS1-TTMW-30412-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-08</u>

Sampled: 01/18/12 14:00

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201436

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	rod	Q	Analyzed
7440-47-3	Chromium, Total	5	200	ug/L	0.98	2.5	5.0		01/31/12 16:43

### INORGANIC ANALYSIS DATA SHEET USEPA-7196A

MM 3/5/13

TT-MW304I2-BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Ground Water

Sampled: 01/18/12 14:00

Solids: <u>0.00</u>

QC Batch: 1201626

SDG: 50063-12

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Laboratory ID: <u>1201244-08</u>

Prepared: 01/19/12 10:34

Preparation: Method-Specific Preparation

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	ı	181	ug/L	0.3	1.0	1.0		01/19/12 11:43

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-10</u>

File ID: 1201244-10.D

Sampled: 01/18/12 16:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 18:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: <u>1201552</u>

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	i	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	Ü
108-90-7	Chlorobenzene	l	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane		0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	Ū
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	Ū
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	บ
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	I	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	Ü
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	2.8	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	ı	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	ı	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	Į.	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	Ū
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	Ū
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75 <b>-09-</b> 2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	Ū

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-Dup02-01182012

BPSI-TT-MU304I2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-10

File ID: <u>1201244-10.D</u>

Sampled: 01/18/12 16:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 18:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	rođ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	ប
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	j	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	5.5	0.16	0.50	1.0	
108-88-3	Toluene	Ī	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	l	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	Ŭ
71-55-6	1,1,1-Trichloroethane		0.23	0.14	0.50	0.1	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	ĵ	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	l	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	ı	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.6	102	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	540587	5.13	90	5.13	
Chlorobenzene-d5	516262	8.08	. 90	8.08	
1,4-Dichlorobenzene-d4	282850	10.38	83	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-Dup02-01182012

BPSI-TT-MU304I2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-10

File 1D: <u>A87_034-0</u>

Sampled: 01/18/12 16:00

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 22:53

Solids:

QC Batch: 1201461

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.182	90	40 - 135	
Tetrachloro-m-xylene	0.202	0.144	71	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-Dup02-01182012

BPSI-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201244-10RE1</u>

File ID: <u>A87 240-0</u>

Sampled: 01/18/12 16:00

Prepared: 01/23/12 11:04

Analyzed: 02/01/12 17:52

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2B02024

Calibration: 2B01011

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	\ 2	1.6	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.160	79	40 - 135	
Tetrachloro-m-xylene	0.202	0.123	61	36 - 114	

^{*} Values outside of QC limits

### **INORGANIC ANALYSIS DATA SHEET** USEPA-6010C

BPS1-TT-Dup02-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-10</u>

Sampled: 01/18/12 16:00

Prepared: 01/31/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201437

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	rod	Q	Analyzed
7439-89-6	Iron, Total	I	10	ug/L	8.1	10	20	J	02/01/12 10:48

### **INORGANIC ANALYSIS DATA SHEET** USEPA-6020A

BPS1-TT-Dup02-01182012

BPSI-TT-MW304E2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-10

Sampled: 01/18/12 16:00

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

QC Batch: 1201436

Preparation: 3020A Digestion

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	5	170	ug/L	0.98	2.5	5.0		01/31/12 16:44

### **INORGANIC ANALYSIS DATA SHEET USEPA-7196A**

BPS1-TT-Dup02-01182012

BP51-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-10

Sampled: 01/18/12 16:00

Prepared: 01/19/12 10:34

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201626

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	182	ug/L	0.3	1.0	1.0		01/19/12 11:46

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-05

File ID: 1201254-05.D

Sampled: 01/19/12 11:17

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 16:05

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

OC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

QC Batch:			L cover / mil	ъ. т	100	100	
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	- Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	0.1	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	l	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	I	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	i	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	· 0.25	1.0	Ŭ
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	l	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	· U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	Ī	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	I	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	υ
108-87-2	Methylcyclohexane		0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	υ

#### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-05</u>

File ID: <u>1201254-05.D</u>

Sampled: 01/19/12 11:17

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 16:05

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

. . . . .

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	l	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<u> </u>	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	ı	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	ı	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	Ū
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	40.7	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	495461	5.13	83	5.13	
Chlorobenzene-d5	466712	8.08	.84	8.08	
1,4-Dichlorobenzene-d4	249857	10.38	78	10.38	

^{*} Values outside of QC limits

#### BPS1-TT-MW304D-01192012

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-05</u>

File ID: <u>A87_041-0</u>

Sampled: 01/19/12 11:17

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 01:43

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 1000 mL/2 mL

QC Batch: 1201518

Sequence: <u>2B06048</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	roð	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	ı	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	Ŭ
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	l	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.200	0.198	99	40 - 135	
Tetrachloro-m-xylene	0.200	0.163	82	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201254-05RE1</u>

File ID: A87 376-0

Sampled: 01/19/12 11:17

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 03:56

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 1000 mL/2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

	CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
Ī	12672-29-6	PCB-1248	4	4.2	0.22	0.32	0.80	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.200	0.194	97	40 - 135	
Tetrachloro-m-xylene	0.200	0.156	78	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201254-05</u>

Sampled: 01/19/12 11:17

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	]	160	ug/L	8.1	10	20		01/30/12 14:41

## INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-05

Sampled: 01/19/12 11:17 Prepared: 01/27/12 07:00

Solids: <u>0.00</u> Preparation: <u>3020A Digestion</u>

QC Batch: 1201622 Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.5	ug/L	0.20	0.50	0.1		01/31/12 16:11

#### BPS1-TT-MW305S-01172012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-06</u>

File ID: <u>1201218-06.D</u>

Sampled: <u>01/17/12 10:50</u>

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 13:18

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	Ū
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	Ŭ
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	บ
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	j	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	j	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	Ū
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	ı	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	Ū
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0,50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	<b>I</b>	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	Ū
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	Ü
591 <b>-78-6</b>	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	Ŭ
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	Ū
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-06

File ID: <u>1201218-06.D</u>

Sampled: 01/17/12 10:50

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 13:18

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	£	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	ı	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	l	0.50	0.16	0.50	1.0	U
108-88-3	Toluene		0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	l	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene		0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	J	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	Ī	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	Ū
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.8	102	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	569876	5.13	95	5.13	
Chlorobenzene-d5	542177	8.08	, 94	8.08	
1,4-Dichlorobenzene-d4	296764	10.38	87	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-06</u>

File ID: <u>A87_015-0</u>

Sampled: 01/17/12 10:50

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 15:13

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	l	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.181	90	40 - 135	
Tetrachloro-m-xylene	0.202	0.162	80	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory 1D: <u>1201218-06</u>

Sampled: 01/17/12 10:50

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	560	ug/L	8.1	10	20		01/30/12 12:26

## INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-06

Sampled: 01/17/12 10:50

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.4	ug/L	0.20	0.50	1.0		01/31/12 15:28

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-Dup01-01172012

BPSI-TT-MW3055

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-12</u>

File ID: 1201218-12.D

Sampled: 01/17/12 12:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 19:18

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	l	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	i	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	l l	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	ı	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	ı	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71 <b>-</b> 8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	Ū
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	ı	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	I	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	υ
78-87-5	1,2-Dichloropropane	ı	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	υ
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	0.1	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone		0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	ι
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	Ţ
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	τ
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	ι

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-Dup01-01172012

BPSI-TT-MW305\$

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-12</u>

File ID: <u>1201218-12.D</u>

Sampled: 01/17/12 12:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 19:18

Solids:

Preparation: 5030B Aqueous Purge &

,

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	I	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	i	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	I	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	i	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	ı	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene .	40.0	39.2	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	541628	5.13	90	5.13	
Chlorobenzene-d5	515065	8.08	, 90	8.08	
1,4-Dichlorobenzene-d4	285259	10.38	84	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-Dup01-01172012

3PSI-TT-MW3055

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-12</u>

File ID: A87 023-0

Sampled: 01/17/12 12:00

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 18:27

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016		0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	J	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.184	90	40 - 135	
Tetrachloro-m-xylene	0.204	0.162	79	36 - 114	

^{*} Values outside of QC limits

## INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-Dup01-01172012

BP51-TT-MW305,5

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-12</u>

Sampled: 01/17/12 12:00

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	650	ug/L	8.1	10	20		01/30/12 12:50

### INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-Dup01-01172012

BP51- TT-MW305 5

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-12

Sampled: 01/17/12 12:00

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: <u>1201434</u>

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.6	ug/L	0.20	0.50	1.0		01/31/12 15:38

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory I

Laboratory ID: <u>1201218-08</u> File ID: <u>1201218-08.D</u>

Sampled: 01/17/12 11:58

Prepared: 01/23/12 08:00 Analyzed: 01/23/12 14:13

Solids:

Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: <u>1201552</u> Sequence: <u>2A24017</u> Calibration: <u>2A18010</u> Instrument: <u>224</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	Ū
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	Ū
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	0.1	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	ı	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.49	0.14	0.50	1.0	J
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	Ū
75-00-3	Chloroethane	l	0.50	0.15	0.50	1.0	U
67-66 <b>-</b> 3	Chloroform	l	0.27	0.16	0.50	1.0	J
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	I	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	Ū
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	Ŭ
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	I,1-Dichloroethane	1	2.7	0.19	0.50	1.0	· · · · · · · · · · · · · · · · · · ·
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	1.3	0.17	0.50	1.0	
156-59-2	cis-1,2-Dichloroethene	1	4.7	0.17	0.50	0.1	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	0.1	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	Ų
123-91-1	1,4-Dioxane	i	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0,24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	Ū
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93 <b>-</b> 3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

#### ORGANIC ANALYSIS DATA SHEET **USEPA-8260B**

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-08

File ID: 1201218-08.D

Sampled: 01/17/12 11:58

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 14:13

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)		0.50	0.23	0.50	5.0	Ū
100-42-5	Styrene		0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	ı	0.50	0.12	0.50	1.0	Ü
127-18-4	Tetrachloroethene	I	3.3	0.16	0.50	1.0	
108-88-3	Toluene		0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	İ	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71 <b>-</b> 55-6	1,1,1-Trichloroethane		0.28	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane		0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	3100	0.18	0.50	1.0	E
75-69-4	Trichlorofluoromethane	l	0.91	0.18	0.50	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	1.1	0.22	0.50	1.0	
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	]	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.9	102	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	573063	5.13	95	5.13	
Chlorobenzene-d5	539488	8.08	, 94	8.08	
1,4-Dichlorobenzene-d4	298649	10.38	88	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET . USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-08RE1</u>

File ID: <u>1201218-08D.D</u>

Sampled: 01/17/12 11:58

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 18:23

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

<b>V</b> 2				M. <u>21110010</u>		mstrument. <u>ZZ+</u>		
CAS No.	Analyte (	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q	
67-64-1	Acetone	50	50	33	50	500	U	
71-43-2	Benzene	30	25	5.8	25	50	Ü	
74-97-5	Bromochloromethane	50	25	7.8	25	50	U	
75-27-4	Bromodichloromethane	50	25	6.7	25	50	U	
75-25-2	Bromoform	50	12	5.1	12	50	U	
74-83-9	Bromomethane	50	25	14	25	50	U	
75-15-0	Carbon Disulfide	50	25	9.4	25	250	Ü	
56-23-5	Carbon Tetrachloride	50	25	7.2	25	50	Ŭ	
108-90-7	Chlorobenzene	50	25	6.4	25	50	U	
75-00-3	Chloroethane	50	25	7.5	25	50	บ	
67-66-3	Chloroform	50	25	8.0	25	50	U	
74-87-3	Chloromethane	50	25	9.0	25	50	U	
110-82-7	Cyclohexane	50	25	14	25	250	U	
96-12-8	1,2-Dibromo-3-chloropropane	50	25	13	25	100	U	
124-48-1	Dibromochloromethane	50	12	4.7	12	50	U	
106-93-4	1,2-Dibromoethane	50	12	5.4	12	50	Ü	
95-50-1	1,2-Dichlorobenzene	50	25	7.7	25	50	Ū	
541-73-1	1,3-Dichlorobenzene	50	12	5.3	12	50	U	
106-46-7	1,4-Dichlorobenzene	50	25	7.8	25	50	U	
75-71-8	Dichlorodifluoromethane	50	25	12	25	50	U	
75-34-3	1,1-Dichloroethane	50	25	9.7	25	50	U	
107-06-2	1,2-Dichloroethane	50	25	6.1	25	50	U	
75-35-4	1,1-Dichloroethene	50	25	8.6	25	50	U	
156-59-2	cis-1,2-Dichloroethene	50	25	8.6	25	50	Ŭ	
156-60-5	trans-1,2-Dichloroethene	50	25	5.7	25	50	Ū	
78-87-5	1,2-Dichloropropane	50	25	7.3	25	50	U	
10061-01-5	cis-1,3-Dichloropropene	50	5.0	2.5	5.0	50	U	
10061-02-6	trans-1,3-Dichloropropene	50	12	5.4	12	50	U	
123-91-1	1,4-Dioxane	50	1200	500	1200	2500	Ŭ	
100-41-4	Ethylbenzene	50	12	5.4	12	50	U	
591-78-6	2-Hexanone	50	25	12	25	250	U	
98-82-8	Isopropylbenzene	50	25	8.4	25	50	U	
79-20-9	Methyl Acetate	50	25	14	25	250	Ū	
1634-04-4	Methyl tert-Butyl Ether	50	25	6.4	25	50	Ū	
108-87-2	Methylcyclohexane	50	25	12	25	250	U	
75-09-2	Methylene Chloride	50	25	17	25	50	U	
78-93-3	2-Butanone (MEK)	50	25	14	25	250	Ū	

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-08RE1 File ID: 1201218-08D.D

Sampled: 01/17/12 11:58 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 18:23

Solids: Preparation: <u>5030B Aqueous Purge & Initial/Final</u>: <u>5 mL/5 mL</u>

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	50	25	12	25	250	U
100-42-5	Styrene	50	5.0	2.8	5.0	50	Ü
79-34-5	1,1,2,2-Tetrachloroethane	50	25	6.0	25	50	U
127-18-4	Tetrachloroethene	50	25	8.2	25	50	Ü
108-88-3	Toluene	50	5.0	2.8	5.0	50	U
87-61-6	1,2,3-Trichlorobenzene	50	25	6.9	25	100	Ü
120-82-1	1,2,4-Trichlorobenzene	50	25	7.4	25	100	U
71-55-6	1,1,1-Trichloroethane	50	25	7.2	25	50	U
79-00-5	1,1,2-Trichloroethane	50	25	7.6	25	50	U
79-01-6	Trichloroethene	50	3900	9.2	25	50	
75-69-4	Trichlorofluoromethane	50	25	9.0	25	50	Ü
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	50	25	[]	25	50	Ū
75-01-4	Vinyl Chloride	50	25	12	25	50	Ŭ
179601-23-1	Xylene, Meta + Para	50	25	14	25	100	U
95-47-6	Xylene, Ortho	50	12	5.2	12	50	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.5	101	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	37.6	94	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	523098	5.13	88	5.13	
Chlorobenzene-d5	496296	8.08	90	8.08	
1,4-Dichlorobenzene-d4	264842	10.38	82	10.38	,

^{*} Values outside of QC limits

#### **ORGANIC ANALYSIS DATA SHEET USEPA-8082**

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-08</u>

File ID: <u>A87 017-0</u>

Sampled: 01/17/12 11:58

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 16:01

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232		0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	·   I	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	บ
11100-14-4	PCB-1268	I	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.192	94	40 - 135	
Tetrachloro-m-xylene	0.204	0.169	83	36 - 114	

^{*} Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET USEPA-8082

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-08RE1

File ID: <u>A87_174-0</u>

Sampled: 01/17/12 11:58

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 15:29

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201461

Sequence: <u>2B01038</u>

Calibration: 2B01011

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.3	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.193	95	40 - 135	
Tetrachloro-m-xylene	0.204	0.165	81	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-08

Sampled: 01/17/12 11:58

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: <u>1201435</u>

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	1100	ug/L	8.1	10	20		01/30/12 12:34

## INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-08

Sampled: 01/17/12 11:58

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOĐ	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	3.5	ug/L	0.20	0.50	1.0		01/31/12 15:33

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

 Matrix: Ground Water
 Laboratory ID: 1201218-10
 File ID: 1201218-10.D

 Sampled: 01/17/12 14:46
 Prepared: 01/23/12 08:00
 Analyzed: 01/23/12 15:09

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

<b>Ψ</b> Ο	. <u>1201332</u> Sequence	. <u>ZAZ4017</u>	Cultotatio	on: <u>ZA18010</u>		instrument: <u>224</u>		
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q	
67-64-1	Acetone	1	1.0	0.66	1.0	10	U	
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U	
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U	
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U	
75-25-2	Bromoform	i i	0.25	0.10	0.25	1.0	U	
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U	
75-15-0	Carbon Disulfide	l	0.50	0.19	0.50	5.0	· U	
56-23-5	Carbon Tetrachloride	l	0.50	0.14	0.50	1.0	U	
108-90-7	Chlorobenzene	I	0.50	0.13	0.50	1.0	U	
75-00-3	Chloroethane	ı	0.50	0.15	0.50	1.0	U	
67-66-3	Chloroform	I	0.19	0.16	0.50	1.0	Ĵ	
74-87-3	Chloromethane	I	0.50	81.0	0.50	1.0	Ū	
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	l	0.50	0.25	0.50	2.0	Ū	
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U	
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U	
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U	
75-71-8	Dichlorodifluoromethane	ı	0.50	0.25	0.50	1.0	U	
75-34-3	1,1-Dichloroethane	1	0.57	0.19	0.50	1.0	J	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U	
75-35-4	1,1-Dichloroethene	1	0.73	0.17	0.50	1.0	J	
156-59-2	cis-1,2-Dichloroethene	ı	0.50	0.17	0.50	1.0	U	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U	
78-87-5	1,2-Dichloropropane	İ	0.50	0.15	0.50	1.0	U	
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U	
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U	
123-91-1	1,4-Dioxane	l	25	10	25	50	U	
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U	
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U	
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	0.1	U	
79-20-9	Methyl Acetate	<u>l</u>	0.50	0.27	0.50	5.0	U	
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	Ŭ	
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	Ŭ	
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	Ū	
78-93-3	2-Butanone (MEK)	ı	0.50	0.28	0.50	5.0	U	

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory 1D: 1201218-10

File ID: 1201218-10.D

Sampled: 01/17/12 14:46

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 15:09

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	Ū
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	Ū
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.9	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	87-61-6 1,2,3-Trichlorobenzene		0.50	0.14	0.50	2.0	U
120-82-1	-82-1 1,2,4-Trichlorobenzene		0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	Ŭ
79-00-5	1,1,2-Trichloroethane	-	0.50	0.15	0.50	1.0	Ū
79-01-6	Trichloroethene	1	140	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.94	0.18	0.50	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	ļ	0.33	0.22	0.50	1.0	J
75-01-4	Vinyl Chloride	i	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para		0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	ı	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.1	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.8	102	70 - 120	
Toluene-d8	40.0	41.3	103	85 - 120	
4-Bromofluorobenzene	40.0	39.4	98	75 - 120	****

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	555682	5.13	92	5.13	
Chlorobenzene-d5	527690	8.08	92	8.08	
1,4-Dichlorobenzene-d4	295729	10.38	87	10.38	·· <del>············</del>

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-10

File ID: <u>A87_021-0</u>

Sampled: 01/17/12 14:46

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 17:38

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 960 mL/2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	I	0.080	0.054	0.080	0.20	บ
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232		0.080	0.041	0.080	0.20	บ
12672-29-6	PCB-1248	l	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	l	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	I	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.193	93	40 - 135	
Tetrachloro-m-xylene	0.208	0.166	80	36 - 114	

^{*} Values outside of QC limits

#### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-10RE1</u>

File ID: <u>A87_178-0</u>

Sampled: 01/17/12 14:46

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 17:06

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 960 mL / 2 mL

QC Batch: 1201461

Sequence: <u>2B01016</u>

Calibration: 2B01003

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.16	0.062	0.080	0.20	J

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.207	99	40 - 135	
Tetrachloro-m-xylene	0.208	0.173	83	36 - 114	

^{*} Values outside of QC limits

## INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-10

Sampled: 01/17/12 14:46

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	1100	ug/L	8.1	10	20		01/30/12 12:42

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-10

Sampled: 01/17/12 14:46

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434 Initial/F

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	22	ug/L	0.20	0.50	1.0		01/31/12 15:35

____ Page 14 of 27

### **INORGANIC ANALYSIS DATA SHEET USEPA-7196A**

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-10

Sampled: 01/17/12 14:46

Prepared: 01/18/12 10:14

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201614

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/18/12 10:41

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

File ID: <u>1201310-07.D</u>

Sampled: 01/23/12 13:50

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 15:41

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	<u>u</u>
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	ı	0.50	0.13	0.50	1,0	U
75-25-2	Bromoform	l	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	i	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	i	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	Ŭ
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	Ŭ
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	บ
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	I	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	I	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	. 1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	I	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	ı	0.50	0:15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	ι
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	J
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	I
79-20-9	Methyl Acetate	I	0.50	0.27	0.50	5.0	Ţ
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	J
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	τ
75-09-2	Methylene Chloride	ī	0.50	0.35	0.50	1.0	Į
78-93-3	2-Butanone (MEK)	<del></del>	0.50	0.28	0.50	5.0	I

#### BPS1-TT-MW306S-01232012

#### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-07</u>

File ID: 1201310-07.D

Sampled: <u>01/23/12 13:50</u>

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 15:41

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	ı	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.40	0.16	0.50	1.0	J
108-88-3	Toluene	l	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	Ū
120-82-1	1,2,4-Trichlorobenzene	l	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	Ū
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	ı	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
79601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.0	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	491916	5.12	93	5.13	
Chlorobenzene-d5	470240	8.08	93	8.08	
1,4-Dichlorobenzene-d4	252002	10.38	85	10.38	

^{*} Values outside of QC limits

#### BPS1-TT-MW306S-01232012

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201310-07</u>

File ID: <u>A87_092-0</u>

Sampled: 01/23/12 13:50

Prepared: 01/25/12 08:27

Analyzed: 01/27/12 01:21

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201593

Sequence: 2B06054

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	l	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	Ŭ
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	Ū
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	l	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.202	100	40 - 135	
Tetrachloro-m-xylene	0.202	0.154	76	36 - 114	

^{*} Values outside of QC limits

#### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201310-07RE1</u>

File ID: <u>A87_292-0</u>

Sampled: 01/23/12 13:50

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 06:30

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201593

Sequence: <u>2B07033</u>

Calibration: 2B03001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.54	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.189	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

Sampled: <u>01/23/12 13:50</u>

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621 Ini

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	rod	Q	Analyzed
7439-89-6	Iron, Total	1	310	ug/L	8.1	10	20		01/30/12 15:59

### INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

Sampled: 01/23/12 13:50

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.3	ug/L	0.20	0.50	1.0		01/31/12 16:40

### INORGANIC ANALYSIS DATA SHEET USEPA-7196A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

Sampled: <u>01/23/12 13:50</u>

Prepared: 01/24/12 10:38

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201753

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/24/12 11:30

### INORGANIC ANALYSIS DATA SHEET SM 5310 C 20th

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-07</u>

Sampled: 01/23/12 13:50

Prepared: 01/25/12 10:42

Solids: <u>0.00</u>

Preparation: General Inorganic Prep

QC Batch: <u>1201785</u>

Initial/Final: 40 mL/40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-44-0	Carbon, Total Organic	I	710	ug/L	280	500	1000	J	01/26/12 03:03

#### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-04</u>

File ID: 1201310-04.D

Sampled: 01/23/12 12:10

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 15:13

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

Instrument: 224 Sequence: <u>2A26019</u> Calibration: 2A18010 QC Batch: 1201663

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	rog	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	0.1	U
74-97-5	Bromochloromethane	ı	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	Ĭ	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	Ī	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	i	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	ı	0.50	0.15	0.50	1.0	Ŭ
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	ı	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	I	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	j j	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	i	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	ı	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	i	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

#### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-04</u>

File ID: <u>1201310-04.D</u>

Sampled: 01/23/12 12:10

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 15:13

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	·I	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	ı	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	l	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	I	0.50	0.15	0.50	2.0	Ū
71-55-6	1,1,1-Trichloroethane	I	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.54	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	l	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	ı	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromotluorobenzene	40.0	38.4	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	492913	5.13	93	5.13	
Chlorobenzene-d5	466790	8.08	92	8.08	
1,4-Dichlorobenzene-d4	250499	10.38	85	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-TT-MW3061-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-04

File ID: A87 088-0

Sampled: 01/23/12 12:10

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 23:44

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201593

Sequence: <u>2B03015</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	i	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	ı	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.215	107	40 - 135	
Tetrachloro-m-xylene	0.202	0.203	100	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-04RE1

File ID: A87 291-0

Sampled: 01/23/12 12:10

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 06:05

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201593

Sequence: <u>2B07033</u>

Calibration: 2B03001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.8	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.203	101	40 - 135	
Tetrachloro-m-xylene	0.202	0.177	88	36 - 114	

^{*} Values outside of QC limits

### **INORGANIC ANALYSIS DATA SHEET** USEPA-6010C

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-04</u>

Sampled: 01/23/12 12:10

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

QC Batch: 1201621

Preparation: 3010A Digestion

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	J	93	ug/L	8.1	10	20		01/30/12 15:34

____Page 16 of 20

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-04

Sampled: 01/23/12 12:10

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.3	ug/L	0.20	0.50	1.0		01/31/12 16:27

## INORGANIC ANALYSIS DATA SHEET **USEPA-7196A**

BPS1-TT-MW3061-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-04</u>

Sampled: 01/23/12 12:10

Prepared: 01/24/12 10:38

Solids: 0.00

QC Batch: 1201753

Preparation: Method-Specific Preparation Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/24/12 11:17

## **INORGANIC ANALYSIS DATA SHEET** SM 5310 C 20th

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-04</u>

Sampled: 01/23/12 12:10

Prepared: 01/25/12 10:42

Solids: <u>0.00</u>

Preparation: General Inorganic Prep

QC Batch: 1201785

Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	3300	ug/L	280	500	1000		01/26/12 02:56

Page 2 of 3

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-02

File ID: 1201310-02.D

Sampled: 01/23/12 10:35

Prepared: 01/26/12 08:00

Solids:

Analyzed: 01/26/12 14:18

Initial/Final: 5 mL/5 mL

Preparation: 5030B Aqueous Purge &

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	Ŭ
74-97-5	Bromochloromethane	I	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	i	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	ı	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	Ŭ
96-12-8	1,2-Dibromo-3-chloropropane	I I	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	ſ	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	l	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	I	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	Ī	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78 <b>-</b> 87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone		0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	I
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	l
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	ι
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	ľ
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	T

Page 33 of 46

#### BPS1-TT-MW306D-01232012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Calibration: 2A18010

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-02

File ID: 1201310-02.D

Sampled: 01/23/12 10:35

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 14:18

Solids:

Preparation: 5030B Aqueous Purge &

QC Batch: 1201663

Sequence: 2A26019

Initial/Final: 5 mL/5 mL

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	i	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.44	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	0.1	Ū
79-01-6	Trichloroethene	1	2.4	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	0.1	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	υ
79601-23-1	Xylene, Meta + Para	ı	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	39.8	99	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	<del></del>
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	497242	5.13	94	5.13	
Chlorobenzene-d5	472128	8.08	93	8.08	
1,4-Dichlorobenzene-d4	254168	10.38	86	10.38	

^{*} Values outside of QC limits

#### BPS1-TT-MW306D-01232012

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201310-02</u>

File ID: <u>A87_086-0</u>

Sampled: 01/23/12 10:35

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 22:55

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	Ū
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	υ
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.197	98	40 - 135	
Tetrachloro-m-xylene	0.202	0.158	78	36 - 114	***************************************

^{*} Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-02RE1

File ID: A87 286-0

Sampled: 01/23/12 10:35

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 04:04

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B08001 Calibration: 2B08001

₹.

Instrument: 144 CAS No. Analyte Dilution CONC. (ug/L) DL LOD LOQ

Q 53469-21-9 PCB-1242 1 0.61 0.062 0.080 0.20

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.193	96	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-02</u>

Sampled: 01/23/12 10:35

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DŁ	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	77	ug/L	8.1	10	20		01/30/12 15:18

## INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-02

Sampled: 01/23/12 10:35

Prepared: 01/27/12 07:00

Solids: <u>0.00</u> QC Batch: <u>1201622</u> Preparation: 3020A Digestion

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.2	ug/L	0.20	0.50	1.0		01/31/12 16:25

## INORGANIC ANALYSIS DATA SHEET SM 5310 C 20th

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201310-02</u>

Sampled: 01/23/12 10:35

Prepared: 01/25/12 10:42

Preparation: General Inorganic Prep

Solids: <u>0.00</u>

Frepared. 01/25/12 10.42

QC Batch: 1201785

Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	1100	ug/L	280	500	0001		01/26/12 02:48

#### BPS1-TT-MW307S-01182012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-09

File ID: 1201244-09.D

Sampled: <u>01/18/12 14:50</u>

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 12:51

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	I	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	Ŭ
74-97-5	Bromochloromethane	I	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	l	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	ı	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.24	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	E E	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	บ
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	i	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	i	0.30	0.27	0.50	5.0	J
1634-04-4	Methyl tert-Butyl Ether	i	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	i	0.50	0.35	0.50	1.0	υ
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

Page 53 of 56

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-09

File ID: 1201244-09.D

Sampled: 01/18/12 14:50

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 12:51

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	υ
127-18-4	Tetrachloroethene	1	1.3	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	l	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	ı	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	l	0.57	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	<b>[</b>	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho		0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.2	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	523242	5.13	88	5.13	
Chlorobenzene-d5	490935	8.08	89	8.08	
1,4-Dichlorobenzene-d4	265413	10.38	82	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-09

File ID: <u>A87 033-0</u>

Sampled: 01/18/12 14:50

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 22:29

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 1000 mL/2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

12674-11-2         PCB-1016         1         0.080         0.054         0.080         0.20           11104-28-2         PCB-1221         1         0.080         0.045         0.080         0.20           11141-16-5         PCB-1232         1         0.080         0.041         0.080         0.20           53469-21-9         PCB-1242         1         0.080         0.062         0.080         0.20           11097-69-1         PCB-1254         1         0.080         0.053         0.080         0.20           11096-82-5         PCB-1260         1         0.080         0.029         0.080         0.20           37324-23-5         PCB-1262         1         0.080         0.080         0.080         0.20	CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	rod	Q
11141-16-5       PCB-1232       1       0.080       0.041       0.080       0.20         53469-21-9       PCB-1242       1       0.080       0.062       0.080       0.20         11097-69-1       PCB-1254       1       0.080       0.053       0.080       0.20         11096-82-5       PCB-1260       1       0.080       0.029       0.080       0.20	674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
53469-21-9         PCB-1242         I         0.080         0.062         0.080         0.20           11097-69-1         PCB-1254         I         0.080         0.053         0.080         0.20           11096-82-5         PCB-1260         I         0.080         0.029         0.080         0.20	104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11097-69-1         PCB-1254         1         0.080         0.053         0.080         0.20           11096-82-5         PCB-1260         1         0.080         0.029         0.080         0.20	141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
11096-82-5 PCB-1260 1 0.080 0.029 0.080 0.20	469-21-9	PCB-1242	ı	0.080	0.062	0.080	0.20	Ü
	097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
37324-23-5 PCB-1262 1 0.080 0.080 0.080 0.20	096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
	324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4 PCB-1268 1 0.080 0.040 0.080 0.20	100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

PCB-1240		0,080		28 V.AU	<u> </u>
System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.200	0.193	96	40 - 135	
Tetrachloro-m-xylene	0.200	0.176	88	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-09

Sampled: 01/18/12 14:50

Prepared: 01/31/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201437

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	roq	Q	Analyzed
7439-89-6	fron, Total	1	530	ug/L	8.1	10	20		02/01/12 10:44

### INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-09</u>

Sampled: 01/18/12 14:50

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201436

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.0	ug/L	0.20	0.50	1.0		01/31/12 15:56

#### BPS1-TT-MW307I-01182012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-07</u>

File ID: <u>1201244-07.D</u>

Sampled: 01/18/12 12:32

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 17:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	· Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	I	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.20	0.19	0.50	5.0	J
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	i	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	บ
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	ı	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	I	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.23	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	ับ
75-35-4	1,1-Dichloroethene	L	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	i	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0,50	1.0	U
78-87-5	1,2-Dichloropropane	I	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	ı	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	υ
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	I	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	υ

Page 49 of 56

#### BPS1-TT-MW307I-01182012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-07

File ID: 1201244-07.D

Sampled: 01/18/12 12:32

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 17:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	I I	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	I	1.1	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	I,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	İ	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para		0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	Ū

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.9	102	85 - 115	-
1,2-Dichloroethane-d4	40.0	40.5	101	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	538692	5.13	89	5.13	
Chlorobenzene-d5	512513	8.08	, 89	8.08	
1,4-Dichlorobenzene-d4	281998	10.38	83	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201244-07</u>

File ID: A87 029-0

Sampled: 01/18/12 12:32

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 20:52

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL/2 mL

Instrument: 144

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	I	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	Ū
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	Ū

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.185	90	40 - 135	
Tetrachloro-m-xylene	0.206	0.151	73	36 - 114	

^{*} Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET USEPA-8082

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201244-07RE1</u>

File ID: <u>A87 278-0</u>

Sampled: 01/18/12 12:32

Prepared: 01/23/12 11:04

Analyzed: 02/03/12 00:50

Solids:

Preparation: 3510C Liquid-Liquid Ext

...

Initial/Final: 970 mL/2 mL

_____

_____

i mai. <u>970 me / 2 me</u>

QC Batch: <u>1201461</u>

Sequence: 2B03005

Calibration: 2B03001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	rog	Q
12672-29-6	PCB-1248	[	0.84	0.054	0.080	0.20	
		<del>-1</del>	·		1-1-1		<u> </u>

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.181	88	40 - 135	
Tetrachloro-m-xylene	0.206	0.145	70	36 - 114	

^{*} Values outside of QC limits

## INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-07</u>

Sampled: 01/18/12 12:32

Prepared: 01/23/12 07:00

Solids: <u>0.00</u> QC Batch: <u>1201435</u> Preparation: 3010A Digestion

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	460	ug/L	8.1	10	20		01/30/12 13:22

## **INORGANIC ANALYSIS DATA SHEET** USEPA-6020A

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-07</u>

Sampled: 01/18/12 12:32

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

QC Batch: 1201434

Preparation: 3020A Digestion

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	12	ug/L	0.20	0.50	1.0		01/31/12 15:50

## INORGANIC ANALYSIS DATA SHEET USEPA-7196A

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-07</u>

Sampled: 01/18/12 12:32

Prepared: 01/19/12 10:34

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201625

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/19/12 11:21

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

#### BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-04

File ID: <u>1201244-04.D</u>

Sampled: 01/18/12 10:42

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:56

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone		1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	Ū
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	ı	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	ı	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		0.50	0.25	0.50	2.0	Ū
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	ı	0.25	0.11	0.25	1.0	Ū
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	Ū
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	i	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	I	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	ı	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	ı	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	Į.	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	l	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	ı	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride		0.50	0.35	0.50	1.0	Ü
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	υ

#### BPS1-TT-MW307D-01182012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

SDG: 50063-12 Laboratory: TriMatrix Laboratories, Inc.

Project: NWIRP Bethpage, NY 01-CTO WE44(04) Client: TETRA TECH NUS - Pittsburgh

Laboratory ID: 1201244-04 File ID: <u>1201244-04.D</u> Matrix: Ground Water Analyzed: 01/24/12 11:56 Prepared: 01/24/12 08:00

Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL Solids:

Instrument: 224 Calibration: 2A18010 Sequence: 2A25008 QC Batch: 1201603

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	Ū
100-42-5	Styrene	l	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	Ī	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	. [	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	Ŭ
79-01-6	Trichloroethene	J	0.50	0.18	0.50	1.0	Ü
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	Ŭ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	j	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.0	105	85 - 115	
1,2-Dichloroethane-d4	40.0	41.0	102	70 - 120	
Toluene-d8	40.0	40.7	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	517989	5.13	87	5.13	
Chlorobenzene-d5	489258	8.08	. 88	8.08	
1,4-Dichlorobenzene-d4	264473	10.38	82	10.38	

^{*} Values outside of QC limits

Sampled: 01/18/12 10:42

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-04

File ID: <u>A87_026-0</u>

Sampled: 01/18/12 10:42

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 19:39

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL/2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	I	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	l	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	ı	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	ı	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	l l	0.080	0.029	0.080	0.20	บ
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268		0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.200	97	40 - 135	
Tetrachloro-m-xylene	0.206	0.162	78	36 - 114	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201244-04RE1</u>

File ID: A87 181-0

Sampled: 01/18/12 10:42

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 18:19

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL/2 mL

QC Batch: 1201461

Sequence: 2B01016

Calibration: 2B01003

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.56	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.210	102	40 - 135	·····
Tetrachloro-m-xylene	0.206	0.199	97	36 - 114	

^{*} Values outside of QC limits

## INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-04

Sampled: 01/18/12 10:42

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	iron, Total	l	460	ug/L	8.1	10	20		01/30/12 13:10

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201244-04</u>

Sampled: 01/18/12 10:42

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparetion: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	I	13	ug/L	0.20	0.50	1.0		01/31/12 15:41

#### BPS1-TT-MW308S-01162012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-04 File ID: 1201218-04.D

Sampled: 01/16/12 16:05 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 12:23

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: <u>1201552</u> Sequence: <u>2A24017</u> Calibration: <u>2A18010</u> Instrument: <u>224</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	0.1	10	Ū
71-43-2	Benzene	I	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	I	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	Ū
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	Ŭ
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	Ŭ
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	Ŭ
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	Ŭ
75-71-8	Dichlorodifluoromethane	ı	0.50	0.25	0.50	1.0	Ŭ
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	0.1	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	l l	0.25	0.11	0.25	1.0	U
. 591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	Ŭ
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	Ū
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	Ū
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	<del>                                     </del>	0.50	0.28	0.50	5.0	U

Page 17 of 56

#### BPS1-TT-MW308S-01162012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-04

File ID: <u>1201218-04.D</u>

Sampled: 01/16/12 16:05

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 12:23

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	l	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	J	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-I	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	I	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	l	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.71	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	I	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane .	40.0	40.5	[0]	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	40.9	102	85 - 120	······································
4-Bromofluorobenzene	40.0	39.0	98	75 - 120	···.

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	560980	5.13	93	5.13	
Chlorobenzene-d5	528535	8.08	92	8.08	
1,4-Dichlorobenzene-d4	290125	10.38	85	10.38	

^{*} Values outside of QC limits

#### BPS1-TT-MW308S-01162012

### **ORGANIC ANALYSIS DATA SHEET USEPA-8082**

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Project: NWIRP Bethpage, NY 01-CTO W Client: TETRA TECH NUS - Pittsburgh

Matrix: Ground Water Laboratory ID: <u>1201218-04</u> File ID: A87 013-0

Sampled: 01/16/12 16:05

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 14:24

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	บ
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	υ
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	l	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.190	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.165	81	36 - 114	

^{*} Values outside of QC limits

### **ORGANIC ANALYSIS DATA SHEET USEPA-8082**

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-04RE1</u>

File ID: A87_169-0

Sampled: 01/16/12 16:05

Prepared: 01/23/12 11:04

Solids:

Analyzed: 01/28/12 13:28

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: <u>1201461</u>

Sequence: 2B01038

Calibration: 2B01011

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q	l
12672-29-6	PCB-1248	1	0.20	0.054	0.080	0.20		
								1

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.199	97	40 - 135	
Tetrachloro-m-xylene	0.204	0.177	87	36 - 114	

^{*} Values outside of QC limits

## **INORGANIC ANALYSIS DATA SHEET** USEPA-6010C

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-04</u>

Sampled: 01/16/12 16:05

Prepared: 01/23/12 07:00

Solids: <u>0.00</u> QC Batch: 1201435 Preparation: 3010A Digestion

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	150	ug/L	8.1	10	20		01/30/12 11:53

__ _ _ _ Page 8 of 27

## INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-04

Sampled: 01/16/12 16:05

Prepared: 01/20/12 05:30

Solids: <u>0.00</u> QC Batch: <u>1201434</u> Preparation: 3020A Digestion

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	10	ug/L	0.20	0.50	1.0		01/31/12 15:22

#### BPS1-TT-MW308I-01162012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Client: <u>TETRA TECH NUS - Pittsburgh</u>

Matrix: <u>Ground Water</u> Labo

Laboratory ID: <u>1201218-03</u>

File ID: 1201218-03.D

Sampled: 01/16/12 14:40

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 11:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

SDG: 50063-12

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	]	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97 <b>-</b> 5	Bromochloromethane	ı	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	I	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	ı	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	Ū
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	Ū
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	Ū
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	I	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	I	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	j	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	ı	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	i	0.50	0.17	0.50	0.1	Ū
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	I	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	I	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

____ Page 15 of 56

#### BPS1-TT-MW308I-01162012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-03 File ID: 1201218-03.D

Sampled: 01/16/12 14:40 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 11:55

Solids: Preparation: <u>5030B Aqueous Purge & Initial/Final</u>: <u>5 mL/5 mL</u>

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	l	0.50	0.23	0.50	5.0	Ū
100-42-5	Styrene	ı	0.10	0.056	0.10	1.0	U
79-34 <b>-</b> 5	1,1,2,2-Tetrachloroethane	I	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	l	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	I	0.50	0.15	0.50	2.0	U
71-55-6	I,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.2	101	85 - 115	
1,2-Dichloroethane-d4	40.0	39.3	98	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	39.4	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	580762	5.13	96	5.13	
Chlorobenzene-d5	546951	8.08	95	8.08	
1,4-Dichlorobenzene-d4	302793	10,38	89	10.38	

^{*} Values outside of QC limits

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-03</u>

File ID: A87 012-0

Sampled: 01/16/12 14:40

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 14:00

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	ı	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	. 1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	L	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	l l	0.080	0.029	0.080	0.20	Ū
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	Ŭ
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.193	93	40 - 135	
Tetrachloro-m-xylene	0.206	0.171	83	36 - 114	

^{*} Values outside of QC limits

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-03REI

File ID: <u>A87_168-0</u>

Sampled: 01/16/12 14:40

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 13:03

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461 Sequence: <u>2B01016</u>

Calibration: 2B01003

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	I	0.52	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.209	101	40 - 135	
Tetrachloro-m-xylene	0.206	0.183	89	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-03</u>

Sampled: 01/16/12 14:40

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	240	ug/L	8.1	10	20		01/30/12 11:49

____ Page 7 of 27

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-03

Sampled: 01/16/12 14:40

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	10	ug/L	0.20	0.50	1.0		01/31/12 15:21

#### BPS1-TT-MW308D-01162012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: <u>TriMatrix Laboratories</u>, Inc. SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

 Matrix:
 Ground Water
 Laboratory ID:
 1201218-02
 File ID:
 1201218-02.D

 Sampled:
 01/16/12 12:30
 Prepared:
 01/23/12 08:00
 Analyzed:
 01/23/12 11:27

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: <u>1201552</u> Sequence: <u>2A24017</u> Calibration: <u>2A18010</u> Instrument: <u>224</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	rod	Q
67-64-1	Acetone	l	1.0	0.66	1.0	10	Ü
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	บ
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	บ
74-83-9	Bromomethane	1	0.50	0.28	0.50	0.1	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	บ
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	l	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.19	0.16	0.50	1.0	Ј
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	l	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34 <b>-</b> 3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	j	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	I	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	0.1	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	Ū
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	Ū

#### BPS1-TT-MW308D-01162012

Initial/Final: 5 mL/5 mL

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-02 File ID: 1201218-02.D

Sampled: 01/16/12 12:30 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 11:27

QC Batch: <u>1201552</u> Sequence: <u>2A24017</u> Calibration: <u>2A18010</u> Instrument: <u>224</u>

Preparation: 5030B Aqueous Purge &

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	l	0.50	0.23	0.50	5.0	Ū
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	l	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.70	0.16	0.50	1.0	J
108-88-3	Toluene	ı	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1 .	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.6	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane		0.50	0.22	0.50	1.0	υ
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	]	0.50	0.29	0.50	2.0	บ
95-47-6	Xylene, Ortho	l	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.7	102	85 - 115	
1,2-Dichloroethane-d4	40.0	39.8	99	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	······
4-Bromofluorobenzene	40.0	39.3	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	572613	5.13	95	5.13	
Chlorobenzene-d5	539709	8.08	94	8.08	
1,4-Dichlorobenzene-d4	298556	10.38	88	10.38	

^{*} Values outside of QC limits

Solids:

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-02</u>

File ID: <u>A87 011-0</u>

Sampled: 01/16/12 12:30

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 13:36

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL/2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	Ü
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	Ū
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.183	89	40 - 135	
Tetrachloro-m-xylene	0.206	0.168	82	36 - 114	

^{*} Values outside of QC limits

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201218-02RE1</u>

File ID: <u>A87_167-0</u>

Sampled: 01/16/12 12:30

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 12:39

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: <u>2B01016</u>

Calibration: 2B01003

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.073	0.062	0.080	0.20	J

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.207	100	40 - 135	
Tetrachloro-m-xylene	0.206	0.175	85	36 - 114	<u></u>

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-02</u>

Sampled: 01/16/12 12:30

Prepared: 01/23/12 07:00

Solids: <u>0.00</u> QC Batch: <u>1201435</u> Preparation: 3010A Digestion

Initis

CAS No.	Analyte	Dil. Factor	Conc.	Units	DŁ	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	Í	240	ug/L	8.1	10	20		01/30/12 11:45

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201218-02</u>

Sampled: 01/16/12 12:30

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	17	ug/L	0.20	0.50	1.0		01/31/12 15:19

____ Page 6 of 27

#### BPS1-TT-MW309S-01102012

Analyzed: 01/18/12 17:25

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: <u>1201112-02</u> File ID: 1201112-02.D Prepared: 01/18/12 13:00 Sampled: 01/10/12 15:00

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: 1201389 Sequence: <u>2A19006</u> Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	j	1.0	0.66	1.0	10	Ū
71-43-2	Benzene	1 1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane		0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	ı	0.25	0.10	0.25	1.0	Ū
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	Ū
56-23-5	Carbon Tetrachloride	]	0.50	0.14	0.50	1.0	Ū
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	ı	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane		. 0.50	0.18	0.50	1.0	บ
110-82-7	Cyclohexane	ı	0.50	0.29	0.50	5.0	Ü
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	ī	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane		0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	ı	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	i	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	Ü
10061-01-5	cis-1,3-Dichloropropene	ı	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	ı	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	ı	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

BPS1-TT-MW309S-01102012

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201112-02</u>

File ID: 1201112-02.D

Sampled: 01/10/12 15:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 17:25

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	Ū
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	Ū
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	Ū
108-88-3	Toluene	ı	0.10	0.057	0.10	1.0	U
87-61-6	I,2,3-Trichlorobenzene	ı	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	Ū.
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	Ü
79-01-6	Trichloroethene	1	0.61	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	Ū
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	ļ	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	<u>l</u>	0.50	0.29	0.50	2.0	Ü
95-47-6	Xylene, Ortho	ı	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.6	99	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	39.9	100	85 - 120	·
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	621343	5.13	93	5.13	
Chlorobenzene-d5	560678	8.08	93	8.08	· · · · · · · · · · · · · · · · · · ·
1,4-Dichlorobenzene-d4	302809	10.38	89	10.38	

^{*} Values outside of QC limits

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201112-02</u>

File ID: <u>A86_336-0</u>

Sampled: 01/10/12 15:00

Prepared: 01/12/12 08:43

Analyzed: 01/16/12 16:32

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 930 mL/2 mL

QC Batch: 1201141

Sequence: <u>2A20016</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.086	0.058	0.086	0.22	U
11104-28-2	PCB-1221	1	0.086	0.049	0.086	0.22	U
11141-16-5	PCB-1232		0.086	0.044	0.086	0.22	U
53469-21-9	PCB-1242	1	0.086	0.067	0.086	0.22	U
11097-69-1	PCB-1254		0.086	0.057	0.086	0.22	U
11096-82-5	PCB-1260	1	0.086	0.031	0.086	0.22	U
37324-23-5	PCB-1262	1	0.086	0.086	0.086	0.22	U
11100-14-4	PCB-1268	1	0.086	0.043	0.086	0.22	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.215	0.197	91	40 - 135	
Tetrachloro-m-xylene	0.215	0.186	86	36 - 114	

^{*} Values outside of QC limits

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201112-02RE1

File ID: A86 392-0

Sampled: 01/10/12 15:00

Prepared: 01/12/12 08:43

Analyzed: 01/17/12 15:19

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 930 mL / 2 mL

QC Batch: 1201141

Sequence: 2A20029

Calibration: 2A20009

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	1.0	0.058	0.086	0.22	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.215	0.204	95	40 - 135	
Tetrachloro-m-xylene	0.215	0.182	84	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201112-02</u>

Sampled: 01/10/12 15:00

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	2100	ug/L	8.1	10	20		01/30/12 11:33

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW309S-01102012-F

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201112-03</u>

Sampled: 01/10/12 15:00

Prepared: 01/24/12 07:00

Solids: <u>0.00</u>

Preparation: General Metals Prep

QC Batch: 1201439

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	92	ug/L	8.1	10	20		01/26/12 14:17

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201112-02</u>

Sampled: 01/10/12 15:00

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	18	ug/L	0.20	0.50	1.0		01/31/12 15:14

___ Page 1 of 27

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW309S-01102012-F

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201112-03</u>

Sampled: 01/10/12 15:00

Prepared: 01/24/12 07:00

Solids: <u>0.00</u>

Preparation: General Metals Prep

QC Batch: 1201438

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	13	ug/L	0.20	0.50	1.0		01/31/12 14:56

#### BPS1-TT-MW309I-01112012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201126-02</u>

File ID: 1201126-02.D

Sampled: <u>01/11/12 10:00</u>

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 17:52

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

QC Batch	: <u>1201389</u> Sequence:	2A19006	Calibratio	n: <u>2A18010</u>	l:	Instrument: 22	
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	Ü
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	Ū
75-27-4	Bromodichloromethane	]	0.50	0.13	0.50	1.0	Ü
75-25-2	Bromoform	I	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	Ū
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	0.1	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	Ū
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34 <b>-</b> 3	1,1-Dichloroethane	i	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	ī	0.50	0.17	0.50	1.0	ט
156-60-5	trans-1,2-Dichloroethene	I	0.50	0.11	0.50	1.0	U
78-87 <b>-</b> 5	1,2-Dichloropropane	I	0.50	0:15	0.50	1.0	Ū
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	01	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	ı	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene		0.50	0.17	0.50	1.0	Ū
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	Ū
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	ı	0.50	0.23	0.50	5,0	U
75-09-2	Methylene Chloride	I	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-02

File ID: 1201126-02.D

Sampled: 01/11/12 10:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 17:52

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201389

Sequence: <u>2A19006</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	]	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	I	0.50	0.12	0.50	1.0	Ū
127-18-4	Tetrachloroethene	l	0.50	0.16	0.50	1.0	Ū
108-88-3	Toluene		0.10	0.057	0.10	1.0	บ
87-61-6	1,2,3-Trichlorobenzene		0.50	0.14	0.50	2.0	Ū
120-82-1	1,2,4-Trichlorobenzene	l	0.50	0.15	0.50	2.0	Ū
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	Ū
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	ı	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.6	99	85 - 115	
1,2-Dichloroethane-d4	40.0	39.5	99	70 - 120	
Toluene-d8	40.0	39.6	99	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	628762	5.13	94	5.13	
Chlorobenzene-d5	563778	8.08	, 94	8.08	
1,4-Dichlorobenzene-d4	304000	10.38	89	10.38	

^{*} Values outside of QC limits

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201126-02</u>

File ID: A86 341-0

Sampled: 01/11/12 10:00

Prepared: 01/13/12 08:41

Analyzed: 01/16/12 18:33

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1201186

Sequence: <u>2A20016</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	Ŭ
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	Ü
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	ט
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.187	92	40 - 135	
Tetrachloro-m-xylene	0.202	0.141	70	36 - 114	

^{*} Values outside of QC limits

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201126-02RE1</u>

File ID: <u>A86 386-0</u>

Sampled: 01/11/12 10:00

Prepared: 01/13/12 08:41

Analyzed: 01/17/12 12:53

Solids:

Preparation: 3510C Liquid-Liquid Ext

ĺn

. . . . . . .

001,440

. . . p ... ....

ata Enqued And

Initial/Final: 990 mL/2 mL

QC Batch: 1201186

Sequence: <u>2A20018</u>

Calibration: 2A20002

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.43	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.187	93	40 - 135	
Tetrachloro-m-xylene	0.202	0.143	71	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

ies, Inc. SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201126-02</u>

Sampled: 01/11/12 10:00

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

ricparca. Onzarizorios

QC Batch: <u>1201435</u>

Preparation: 3010A Digestion

		Dil.				100	100	0	Analyzed
CAS No.	Analyte	Factor	Conc.	Units	DL	LOD	LOQ	<u> </u>	
7439-89-6	Iron, Total	1	130	ug/L	8.1	10	20		01/30/12 11:37

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201112-02</u>

Sampled: 01/10/12 15:00

Prepared: 01/11/12 08:14

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201170

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	8.9	ug/L	0.3	1.0	1.0		01/11/12 10:10

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-02

Sampled: 01/11/12 10:00

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	49	ug/L	0.20	0.50	1.0		01/31/12 15:15

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201126-02</u>

Sampled: 01/11/12 10:00

Prepared: 01/12/12 08:23

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201249

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	2	47.7	ug/L	0.6	2.0	2.0		01/12/12 09:58

#### BPS1-TT-MW309D-01112012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201126-03</u>

File ID: <u>1201126-03.D</u>

Sampled: 01/11/12 14:10

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 18:20

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201389

Sequence: <u>2A19006</u>

Calibration: 2A18010

Instrument: 224

QC Batch	. <u>1201363</u> Sequence.	2A 19000	Cantitatio	n: <u>ZA18010</u>	16	istrument: <u>ZZ</u>	<u> </u>
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	Ū
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	]	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	บ
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	ı	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	] 1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.27	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	ı	0.50	0.15	0.50	1.0	Ū
10061-01-5	cis-1,3-Dichloropropene	I	0.10	0.050	0.10	1.0	Ū
10061-02-6	trans-1,3-Dichloropropene	i	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	บ
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	I	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	]	0.50	0.28	0.50	5.0	U

____ Page 9 of 56

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-03

File ID: <u>1201126-03.D</u>

Sampled: 01/11/12 14:10

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 18:20

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201389

Sequence: <u>2A19006</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.1	0.16	0.50	1.0	
108-88-3	Toluene	I	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	Ū
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	I,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.45	0.22	0.50	1.0	J
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	บ
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	ı	0.25	0.10	0.25	1.0	Ū

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.6	99	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	40.1	100	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	617610	5.12	92	5.13	
Chlorobenzene-d5	562579	8.08	• 93	8.08	
1,4-Dichlorobenzene-d4	303302	10.38	89	10.38	

^{*} Values outside of QC limits

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: <u>1201126-03</u>

File ID: A86_342-0

Sampled: 01/11/12 14:10

Prepared: 01/13/12 08:41

Analyzed: 01/16/12 18:58

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 940 mL / 2 mL

QC Batch: 1201186

Sequence: <u>2A20016</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	ÐL	LOD	LOQ	Q
12674-11-2	PCB-1016		0.085	0.057	0.085	0.21	U
11104-28-2	PCB-1221	1	0.085	0.048	0.085	0.21	U
11141-16-5	PCB-1232	1	0.085	0.044	0.085	0.21	U
53469-21-9	PCB-1242	1	0.085	0.066	0.085	0.21	บ
12672-29-6	PCB-1248	1	0.085	0.058	0.085	0.21	U
11097-69-1	PCB-1254	1	0.085	0.057	0.085	0.21	U
11096-82-5	PCB-1260	ı	0.085	0.031	0.085	0.21	U
37324-23-5	PCB-1262	ı	0.085	0.085	0.085	0.21	U
11100-14-4	PCB-1268		0.085	0.042	0.085	0.21	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.213	0.197	93	40 - 135	
Tetrachloro-m-xylene	0.213	0.164	77	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201126-03</u>

Sampled: 01/11/12 14:10

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	2400	ug/L	8.1	10	20		01/30/12 11:41

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-TT-MW309D-01112012-F

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-04

Sampled: 01/11/12 14:10

Prepared: 01/24/12 07:00

Solids: <u>0.00</u>

Preparation: General Metals Prep

QC Batch: 1201439

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	31	ug/L	8.1	10	20		01/26/12 14:27

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-03

Sampled: 01/11/12 14:10

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

QC Batch: 1201434

Preparation: 3020A Digestion

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	7.5	ug/L	0.20	0.50	1.0		01/31/12 15:16

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-TT-MW309D-01112012-F

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201126-04</u>

Sampled: 01/11/12 14:10

Prepared: 01/24/12 07:00

Solids: <u>0.00</u>

Preparation: General Metals Prep

QC Batch: 1201438

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	I	0.56	ug/L	0.20	0.50	1.0	J	01/31/12 14:57

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: <u>1201126-03</u>

Sampled: 01/11/12 14:10

Prepared: 01/12/12 08:23

Solids: <u>0.00</u> QC Batch: <u>1201249</u> Preparation: Method-Specific Preparation

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/12/12 10:00

___ Page 3 of 11

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-01

File ID: 1110398-01.D

Sampled: 10/19/11 11:00

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 16:05

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1112065

Sequence: 1J31056

Calibration: 1J28012

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	υ
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	ı	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	I	0,50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0,50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	Ū
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	I I	0.25	0.094	0.25	1.0	Ū
106-93-4	1,2-Dibromoethane	i	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	I	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	Ū
106-46-7	I,4-Dichlorobenzene	l	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	Ū
Í56-59-2	cis-1,2-Dichloroethene	ı	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene		0.50	0.11	0.50	1.0	U
78-87 <del>-</del> 5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene		0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	บ
100-41-4	Ethylbenzene	I	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	l	0.50	0.27	0.50	5.0	Ū
1634-04-4	Methyl tert-Butyl Ether		0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	ī	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-01

File ID: 1110398-01.D

Sampled: 10/19/11 11:00

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 16:05

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1112065 Sequence: 1J31056 Calibration: 1J28012 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	Ū
100-42-5	Styrene	ı	0.10	0.056	0.10	1.0	Ŭ
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	Ū
87-61-6	1,2,3-Trichlorobenzene	ı	0.50	0.14	0.50	2.0	บ
120-82-1	1,2,4-Trichlorobenzene	ı	0.50	0.15	0.50	2.0	บ
71-55-6	1,1,1-Trichloroethane	ı	0.50	0.14	0.50	1.0	Ū
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	Ū
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	Ū
75-69-4	Trichlorofluoromethane		0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	Ū
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	Ū
95-47-6	Xylene, Ortho	ı	0.25	0.10	0.25	1.0	บ

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.1	105	85 - 115	
1,2-Dichloroethane-d4	40.0	38.7	97	70 - 120	····
Toluene-d8	40.0	39.3	98	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	650570	5.13	746237	5.13	
Chlorobenzene-d5	502992	8.08	548111	8.08	
1,4-Dichlorobenzene-d4	258254	10.38	303977	10.38	······································

^{*} Values outside of QC limits

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Surface Water

Laboratory ID: <u>1110398-01</u>

File ID: A83 044-0

Sampled: 10/19/11 11:00

Prepared: 10/25/11 08:26

Analyzed: 10/27/11 08:56

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1111570

Sequence: <u>1J31031</u>

Calibration: 1J31007

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	ı	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	l	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	I	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262		0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.173	86	40 - 135	
Tetrachloro-m-xylene	0.202	0.149	74	36 - 114	

^{*} Values outside of QC limits

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Surface Water

Laboratory ID: 1110398-01REI

File ID: A83 158-0

Sampled: 10/19/11 11:00

Prepared: 10/25/11 08:26

Analyzed: 10/31/11 19:37

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 990 mL/2 mL

QC Batch: 1111570

Sequence: 1K02044

Calibration: 1K02011

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	!	0.35	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.181	89	40 - 135	
Tetrachloro-m-xylene	0.202	0.158	78	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Surface Water

Sampled: 10/19/11 11:00

Solids: <u>0.00</u>

OC Batch: 1112149

SDG: 50063-9

Project: NWIRP Bethpage, NY 6-CTO WE44

Laboratory ID: 1110398-01

Prepared: 11/02/11 07:00

Preparation: 3010A Digestion

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	l	240	ug/L	8.1	10	20		11/04/11 08:44

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-01

Sampled: 10/19/11 11:00

Prepared: 11/02/11 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1112150

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Anaiyzed
7440-47-3	Chromium, Total	Ţ	2.4	ug/L	0.20	0.50	1.0	[ 	11/04/11 08:30

**BPSI-SW3001** 

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-01

Sampled: 10/19/11 11:00

Prepared: 10/20/11 10:29

Solids: <u>0.00</u>

QC Batch: 1112234

Preparation: Method-Specific Preparation

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	0.4	ug/L	0.3	1.0	1.0	J	10/20/11 10:37

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-02

File ID: 1110398-02.D

Sampled: 10/19/11 11:30

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 16:33

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1112065

Sequence: <u>1J31056</u>

Calibration: 1J28012

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	J
71-43-2	Benzene	I	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0,50	0.16	0.50	1.0	Ū
75-27-4	Bromodichloromethane	. 1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	l	0.25	0.10	0.25	0.1	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	Ū
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	ט
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	Ū
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	ı	0.50	0.29	0.50	5.0	Ū
96-12-8	1,2-Dibromo-3-chloropropane	ı	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	I	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	ı	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	ı	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	I	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	I	0.50	0.17	0.50	1.0	Ü
156-59-2	cis-1,2-Dichloroethene	ı	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-8 <b>7-</b> 5	1,2-Dichloropropane	I	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	l	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	i	0.25	0.11	0.25	1.0	ับ
123-91-1	1,4-Dioxane	I	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	Ū
591 <b>-78-</b> 6	2-Hexanone	1	0.50	0.24	0.50	5.0	Ū
98-82-8	Isopropyibenzene	l	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	บ
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	Ū
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

Page 3 of 6

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-02

File ID: 1110398-02.D

Sampled: 10/19/11 11:30

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 16:33

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1112065

Sequence: <u>1J31056</u>

Calibration: 1J28012

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	ı	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	i	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	ı	0.50	0.14	0.50	2.0	Ü
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	Ū
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	l	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	Ū
75-01-4	Vinyl Chloride	]	0.50	0.24	0.50	1.0	Ü
179601-23-1	Xylene, Meta + Para	I	. 0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	Į Į	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	105	85 - 115	-
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	39.4	99	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	662424	5.13	746237	5.13	
Chlorobenzene-d5	506412	8.08	548111	8.08	
1,4-Dichlorobenzene-d4	269627	10.38	303977	10.38	

^{*} Values outside of QC limits

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Surface Water

Laboratory ID: 1110398-02

File ID: A83 045-0

Sampled: 10/19/11 11:30

Prepared: 10/25/11 08:26

Analyzed: 10/27/11 09:20

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 800 mL / 2 mL

Sequence: <u>1J31031</u>

Calibration: 1J31007

QC Batch:	1111570	Sequence: <u>1J31031</u>	Calibration	• • • • • • • • • • • • • • • • • • • •				
		Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q	
CAS No.	Analyte	Dilucion	ļ	0.067	0.10	0.25	U	
12674-11-2	PCB-1016		0.10		0.10	0.25	Ü	
11104-28-2	PCB-1221	1	0.10	0.057	0.10	0.25	U	
11141-16-5	PCB-1232	l	0.10	0.051		0.25	U	
53469-21-9	PCB-1242	1	0.10	0.077	0.10	0.25	U	
12672-29-6	PCB-1248	11	0.10	0.068	0.10		U	
11097-69-1	PCB-1254	1	0.10	0.066	0.10	0.25	U	
11097-03-1	PCB-1260	l l	0.10	0.036	0.10	0.25	<del></del>	
	PCB-1262		0.10	0.10	0.10	0.25	U	
37324-23-5		1	0.10	0.050	0.10	0.25	U	
11100-14-4	TCD-1200							

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
	0.250	0.216	86	40 - 135	
Decachlorobiphenyl Tetrachloro-m-xylene	0.250	0.186	75	36-114	

^{*} Values outside of QC limits

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: <u>1110398-02</u>

Sampled: 10/19/11 11:30

Prepared: 11/02/11 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1112149

<b>4</b> =									<u> </u>
CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Iron, Total	1	150	ug/L	8.1	10	20		11/04/11 08:48
		<u> </u>	L	<u>.l.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		<del>1</del>	L	<u> </u>	

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-02

Sampled: 10/19/11 11:30

Prepared: 11/02/11 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1112150

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	ı .	0.84	ug/L	0.20	0.50	1.0	J	11/04/11 08:38

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Surface Water

Sampled: 10/19/11 11:30

Solids: <u>0.00</u>

QC Batch: 1112234

SDG: 50063-9

Project: NWIRP Bethpage, NY 6-CTO WE44

Laboratory ID: 1110398-02

Prepared: 10/20/11 10:29

Preparation: Method-Specific Preparation

CAS No.         Analyte         Dil. Factor         Conc.         Units         DL         LOD         LOQ         Q         Analyzed           18540-29-9         Chromium, Hexavalent-Dissolved         1         0.4         ug/L         0.3         1.0         1.0         J         10/20/11 10:39								· · · · · · · · · · · · · · · · · · ·		
7 02 10 10 T 10/20/11 10:39	CAS No.	Analyte		Conc.	Units	DL	LOD	LOQ	Q	Analyzed
			1	0.4	ug/L	0.3	1.0	1.0	J	10/20/11 10:39

BPSI-TT-MW309-0005

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

Laboratory ID: 1110398-06

File ID: <u>A83_032-0</u>

Sampled: 10/19/11 13:15

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 04:05

Solids: <u>95.74</u>

4 Preparation

Preparation: 3550C Sonication Extrac

Initial/Final: 30.2 g / 10 mL

QC Batch: 1111759

Sequence: 1J31022

Calibration: 1J31005

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0070	0.0036	0.0070	0.34	U
11096-82-5	PCB-1260	1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.34	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0346	0.0298	86	60 - 125	
Tetrachloro-m-xylene	0.0346	0.0304	88	32 - 129	

^{*} Values outside of QC limits

BPSI-TT-MW309-0005

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

Laboratory ID: 1110398-06RE1

File ID: A83 163-0

Sampled: 10/19/11 13:15

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 21:38

Solids: <u>95.74</u>

Preparation: 3550C Sonication Extrac

Initial/Final: 30.2 g / 10 mL

QC Batch: 1111759

Sequence: 1K02044

Calibration: 1K02011

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	10	1.3	0.029	0.070	0.34	

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0346	0.0325	94	60 - 125	
Tetrachloro-m-xylene	0.0346	0.0280	81	32 - 129	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-3550B

BPSI-TT-MW309-0005

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Soil

Laboratory ID: 1110398-06

Sampled: 10/19/11 13:15

Prepared: 10/25/11 12:06

Solids: <u>95.74</u>

Preparation: General Inorganic Prep

QC Batch: 1111711

Initial/Final: 10 g / 10 mL

QC Dan	11. <u>11.1.1</u>								r
CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	rod	Q	Analyzed
CASTO	Percent Solids	1	96	%	0.1	0.1	0.1		10/25/11 12:30
				<u> </u>		1	<u> </u>		

BPSI-TT-MW309-0510

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

Laboratory ID: 1110398-07

File ID: A83_033-0

Sampled: 10/19/11 13:30

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 04:29

Solids: 95.86

Preparation: 3550C Sonication Extrac

Initial/Final: 29.4 g/10 mL

QC Batch: 1111759

Sequence: <u>1J31022</u>

Calibration: 1J31005

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	rod	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	υ
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0070	0.0035	0.0070	0.34	υ
11096-82-5	PCB-1260	I	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.34	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0355	0.0299	84	60 - 125	
Tetrachloro-m-xylene	0.0355	0.0319	90	32 - 129	

^{*} Values outside of QC limits

BPSI-TT-MW309-0510

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

Laboratory ID: <u>1110398-07RE1</u>

File ID: A83 164-0

Sampled: 10/19/11 13:30

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 22:03

Solids: <u>95.86</u>

Preparation: <u>3550C Sonication Extrac</u>

Initial/Final: 29.4 g/10 mL

QC Batch: 1111759

Sequence: 1K02044

Calibration: 1K02011

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	5	0.72	0.015	0.035	0.34	

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0355	0.0362	102	60 - 125	
Tetrachloro-m-xylene	0.0355	0.0314	88	32 - 129	

^{*} Values outside of QC limits

BPSI-TT-MW309-0510

Laboratory: TriMatrix Laboratories, Inc.

Project: NWIRP Bethpage, NY 6-CTO WE44

Client: TETRA TECH NUS - Pittsburgh

Laboratory ID: 1110398-07

SDG: 50063-9

Sampled: 10/19/11 13:30

Prepared: 10/25/11 12:06

Solids: 95.86

Matrix: Soil

Preparation: General Inorganic Prep

QC Batch: 1111711

Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	96	%	0.1	0.1	0.1		10/25/11 12:30

BPSI-TT-MW309-1015

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

Laboratory ID: 1110398-05

File ID: A83 031-0

Sampled: 10/19/11 14:15

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 03:40

Solids: 95.38

Preparation: 3550C Sonication Extrac

Initial/Final: 29.8 g / 10 mL

QC Batch: <u>1111759</u>

Sequence: <u>1J31022</u>

Calibration: 1J31005

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.018	0.013	0.018	0.35	U
11104-28-2	PCB-1221	1	0.018	0.012	0.018	0.35	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.35	U
53469-21-9	PCB-1242	1	0.018	0.011	0.018	0.35	บ
11097-69-1	PCB-1254	1	0.0070	0.0036	0.0070	0.35	บ
11096-82-5	PCB-1260	1	0.018	0.0051	0.018	0.35	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.35	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.35	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0352	0.0309	88	60 - 125	
Tetrachloro-m-xylene	0.0352	0.0375	106	32 - 129	

^{*} Values outside of QC limits

BPSI-TT-MW309-1015

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

Laboratory ID: 1110398-05RE1

File ID: <u>A83_162-0</u>

Sampled: 10/19/11 14:15

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 21:14

Solids: <u>95.38</u>

Preparation: 3550C Sonication Extrac

Initial/Final: 29.8 g / 10 mL

QC Batch: 1111759

Sequence: 1K02044

Calibration: 1K02011

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	50	7.0	0.15	0.35	0.68	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-3550B

BPSI-TT-MW309-1015

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Soil

Laboratory ID: 1110398-05

Sampled: 10/19/11 14:15

Prepared: 10/25/11 12:06

Solids: <u>95.38</u>

Preparation: General Inorganic Prep

QC Batch: 1111711

Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	95	%	0.1	0.1	0.1		10/25/11 12:30

BPSI-TT-MW309-1520

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

: Soil Laboratory ID: 1110398-03

File ID: A83 029-0

Sampled: 10/19/11 14:00

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 02:52

Solids: 96.24

Preparation: 3550C Sonication Extrac

Initial/Final: 29.3 g / 10 mL

QC Batch: <u>1111759</u>

Sequence: 1J31022

Calibration: <u>IJ31005</u>

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0070	0.0035	0.0070	0.34	U
11096-82-5	PCB-1260	· 1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.34	Ü
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0355	0.0324	91	60 - 125	
Tetrachloro-m-xylene	0.0355	0.0317	89	32 - 129	

^{*} Values outside of QC limits

BPSI-TT-MW309-1520

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

Laboratory ID: <u>1110398-03RE1</u>

File ID: A83_160-0

Sampled: 10/19/11 14:00

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 20:26

Solids: <u>96.24</u>

Preparation: 3550C Sonication Extrac

Initial/Final: 29.3 g / 10 mL

QC Batch: 1111759

Sequence: <u>1K02044</u>

Calibration: 1K02011

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	20	2.9	0.058	0.14	0.34	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-3550B

BPSI-TT-MW309-1520

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-9</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Soil

Laboratory ID: <u>1110398-03</u>

Sampled: 10/19/11 14:00

Prepared: 10/25/11 12:06

Solids: <u>96.24</u>

Preparation: General Inorganic Prep

QC Batch: 1111711

Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	96	%	0.1	0.1	0.1		10/25/11 12:30

BPSI-TT-MW309-2025

Laboratory: <u>TriMatrix Laboratories, Inc.</u>

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

Laboratory ID: <u>1110398-04</u>

File ID: A83 030-0

Sampled: 10/19/11 13:45

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 03:16

Solids: <u>96.86</u>

Preparation: 3550C Sonication Extrac

Initial/Final: 29.4 g / 10 mL

QC Batch: 1111759

Sequence: 1J31022

Calibration: 1J31005

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0069	0.0028	0.0069	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0069	0.0035	0.0069	0.34	Ū
11096-82-5	PCB-1260	l	0.017	0.0051	0.017	0.34	Ü
37324-23-5	PCB-1262	1	0.0069	0.0019	0.0069	0.34	U
11100-14-4	PCB-1268	1	0.0069	0.0030	0.0069	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0351	0.0327	93	60 - 125	
Tetrachloro-m-xylene	0.0351	0.0326	93	32 - 129	<del></del> .

^{*} Values outside of QC limits

BPSI-TT-MW309-2025

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil

Laboratory ID: 1110398-04RE1

File ID: A83 161-0

Sampled: 10/19/11 13:45

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 20:50

Solids: 96.86

Preparation: 3550C Sonication Extrac

Initial/Final: 29.4 g/10 mL

QC Batch: 1111759

Sequence: 1K02044

Calibration: 1K02011

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	0.46	0.0058	0.014	0.34	

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0351	0.0355	101	60 - 125	
Tetrachloro-m-xylene	0.0351	0.0350	100	32 - 129	

^{*} Values outside of QC limits

BPSI-TT-MW309-2025

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Soil

Laboratory ID: 1110398-04

Sampled: 10/19/11 13:45

Prepared: 10/25/11 12:06

Solids: <u>96.86</u>

QC Batch: 1111711

Preparation: General Inorganic Prep

Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Cone.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	97	%	0.1	0.1	0.1		10/25/11 12:30

#### BPS1-FB01-01182012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-02

File ID: 1201244-02.D

Sampled: 01/18/12 08:10

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:01

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

OC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: <u>224</u>

QC Batch:	QC Batch: 1201603 Sequence		Calibratio		Summent. <u>224</u>	•	
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	Ū
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	Ŭ
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	i	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1,0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	ប
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	I	0.50	0.16	0.50	1.0	บ
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	I	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	i	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	l l	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	j	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.56	0.27	0.50	5.0	J
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	υ
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	τ
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-02</u>

File ID: 1201244-02.D

Sampled: 01/18/12 08:10

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:01

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

OC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	Ŭ
127-18-4	Tetrachloroethene	<u> </u>	0.50	0.16	0.50	1.0	U
108-88-3	Toluene		0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	Ū
120-82-1	1,2,4-Trichlorobenzene	l	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	i	0.50	0.15	0.50	1.0	บ
79-00-3	Trichloroethene	i	7.0	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.5	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.4	101	85 - 120	
4-Bromofluorobenzene	40.0	38.2	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	505584	5.13	85	5.13	
Chlorobenzene-d5	473250	8.08	. 86	8.08	
1,4-Dichlorobenzene-d4	252238	10.38	78	10.38	

^{*} Values outside of QC limits

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water

Laboratory ID: 1201244-02

File ID: A87 024-0

Sampled: 01/18/12 08:10

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 18:51

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	rog	Q	
12674-11-2	PCB-1016	l	0.080	0.054	0.080	0.20	U	
11104-28-2	PCB-1221	I	0.080	0.045	0.080	0.20	U	
11141-16-5	PCB-1232	l	0.080	0.041	0.080	0.20	U	
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U	
12672-29-6	PCB-1248		0.080	0.054	0.080	0.20	U	
11097-69-1	PCB-1254		0.080	0.053	0.080	0.20	U	
11096-82-5	PCB-1260		0.080	0.029	0.080	0.20	U	
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U	
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.197	97	40 - 135	
Tetrachloro-m-xylene	0.204	0.161	79	36 - 114	

^{*} Values outside of QC limits

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-02</u>

Sampled: 01/18/12 08:10

Prepared: 01/23/12 07:00

Solids: <u>0.00</u> QC Batch: 1201435 Preparation: 3010A Digestion

CAS No.	Analyte	Dil. Factor	Сопс.	Units	DL	LOD	гоб	Q	Analyzed
7439-89-6	Iron, Total	1	8.2	ug/L	8.1	10	20	J	01/30/12 13:02

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-02</u>

Sampled: 01/18/12 08:10

Prepared: 01/24/12 07:00

Solids: <u>0.00</u>

гершей. <u>01/24/12 07.00</u>

QC Batch: 1201439

Preparation: <u>General Metals Prep</u> Initial/Final: <u>25 mL / 25 mL</u>

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	10	ug/L	8.1	10	20	U	01/26/12 14:30

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-02</u>

Sampled: 01/18/12 08:10

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.50	ug/L	0.20	0.50	1.0	Ŭ	01/31/12 15:39

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-02</u>

Sampled: 01/18/12 08:10

Prepared: 01/24/12 07:00

Solids: <u>0.00</u>

Preparation: General Metals Prep

QC Batch: 1201438

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Chromium, Dissolved	ı	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 14:58

# INORGANIC ANALYSIS DATA SHEET USEPA-7196A

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-02</u>

Sampled: 01/18/12 08:10

Prepared: 01/19/12 10:34

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201625 Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/19/12 11:15

## ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201310-08</u>

File ID: <u>1201310-08.D</u>

Sampled: 01/23/12 14:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:59

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: <u>1201663</u>

Sequence: <u>2A26019</u>

Calibration: 2A18010

SDG: 50063-13

Instrument: 224

BPS1-FB02-01232012

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-l	Acetone	1	16	0.66	1.0	10	
71-43-2	Benzene	I	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	l	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	ı	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	4.4	0.10	0.25	1.0	
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	บ
75-15-0	Carbon Disulfide	l	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	I	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	ı	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	l	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	3.1	0.094	0.25	1.0	
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	ับ
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	0.1	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	J	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	υ
108-87-2	Methylcyclohexane	ı	0.50	0.23	0.50	5.0	υ
75-09-2	Methylene Chloride	ı	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

____Page 43 of 46

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-08

File ID: <u>1201310-08.D</u>

Sampled: 01/23/12 14:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:59

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	I	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	I	0.51	0.057	0.10	1.0	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	. 1	0.50	0.14	0.50	1.0	υ
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	Ü
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	Ū
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.4	106	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	485580	5.13	92	5.13	
Chlorobenzene-d5	463774	8.08	91	8.08	
1,4-Dichlorobenzene-d4	261261	10.38	88	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water

Laboratory ID: 1201310-08

File ID: <u>A87_093-0</u>

Sampled: 01/23/12 14:30

Prepared: 01/25/12 08:27

Analyzed: 01/27/12 01:45

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 970 mL / 2 mL

QC Batch: 1201593

Sequence: <u>2B03015</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	บ
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	L	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242		0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	ı	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	l	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.176	85	40 ~ 135	
Tetrachloro-m-xylene	0.206	0.151	73	36 - 114	

^{*} Values outside of QC limits

### INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-08

Sampled: 01/23/12 14:30

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

QC Batch: 1201621

Preparation: 3010A Digestion

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	ÐL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	320	ug/L	8.1	10	20		01/30/12 16:03

____ Page 19 of 20

## INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-08

Sampled: 01/23/12 14:30

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.79	ug/L	0.20	0.50	1.0	J	01/31/12 16:41

# INORGANIC ANALYSIS DATA SHEET USEPA-7196A

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-08

Sampled: 01/23/12 14:30

Prepared: 01/24/12 10:38

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201753

Initial/Final: 25 mL/25 mL

	<u></u>			$\overline{}$					
CAS No.	Analyte	Dil. Factor	Conc.	Units	ÐL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	ı	0.5	ug/L	0.3	1.0	1.0	J	01/24/12 11:32

#### BPS1-RB01-01182012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-03</u>

File ID: <u>1201244-03.D</u>

Sampled: 01/18/12 08:20

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:28

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

OC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

QC Batch:	<u>1201603</u> Sequence:	<u>2/12/3000</u>	Canoration: <u>ZATo</u>			Strument. <u>22</u>	
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	I	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	i	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	i	0.50	0.13	0.50	1.0	Ŭ
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	ប
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	I	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	υ
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0:15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	<u> </u>	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	τ
591-78-6	2-Hexanone	T I	0.50	0.24	0.50	5.0	υ
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	τ
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	τ
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	ι
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	Ţ
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	Ţ
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	Ţ

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-03</u>

File ID: <u>1201244-03.D</u>

Sampled: 01/18/12 08:20

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:28

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	ĺ	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	I	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	ī	0.50	0.14	0.50	2.0	U
[20-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	I	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	6.4	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	l	0.50	0.18	0.50	1.0	บ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.5	101	85 - 120	
4-Bromofluorobenzene	40.0	38.4	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	533503	5.13	89	5.13	
Chlorobenzene-d5	498059	8.08	, 90	8.08	
1,4-Dichlorobenzene-d4	268759	10.38	84	10.38	

^{*} Values outside of QC limits

### ORGANIC ANALYSIS DATA SHEET **USEPA-8082**

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water

Laboratory ID: 1201244-03

File ID: <u>A87 025-0</u>

Sampled: 01/18/12 08:20

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 19:15

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 980 mL/2 mL

QC Batch: 1201461

Sequence: <u>2A31043</u>

Calibration: 2A20001

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	I	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248		0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268		0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.189	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.150	74	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

Sampled: 01/18/12 08:20

Prepared: 01/23/12 07:00

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	29	ug/L	8.1	10	20		01/30/12 13:06

____ Page 19 of 27

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

Sampled: 01/18/12 08:20

Prepared: 01/24/12 07:00

Solids: <u>0.00</u>

Preparation: General Metals Prep

QC Batch: 1201439

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	10	ug/L	8.1	10	20	U	01/26/12 14:34

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-03</u>

Sampled: 01/18/12 08:20

Prepared: 01/20/12 05:30

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 15:40

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-03</u>

Sampled: 01/18/12 08:20

Prepared: 01/24/12 07:00

Solids: <u>0.00</u>

Preparation: General Metals Prep

QC Batch: 1201438 Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 14:59

## **INORGANIC ANALYSIS DATA SHEET USEPA-7196A**

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

Sampled: 01/18/12 08:20

Prepared: 01/19/12 10:34

Solids: <u>0.00</u>

QC Batch: 1201625

Preparation: Method-Specific Preparation

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29 <b>-</b> 9	Chromium, Hexavalent-Dissolved	1	0.4	ug/L	0.3	1.0	1.0	J	01/19/12 11:19

### BPS1-RB02-01232012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-06

File ID: <u>1201310-06.D</u>

Sampled: 01/23/12 13:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:32

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	ı	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	Ū
75-00-3	Chloroethane		0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	l	0.50	0.16	0.50	1.0	Ŭ
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Сусюнехапе	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	υ
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone		0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	I	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	ı	0.50	0.28	0.50	5.0	U

# ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-06

File ID: <u>1201310-06.D</u>

Sampled: 01/23/12 13:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:32

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	ſ	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane		0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1 .	6.5	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho		0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.5	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	40.6	102	85 - 120	
4-Bromofluorobenzene	40.0	38.7	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	503272	5.13	95	5.13	
Chlorobenzene-d5	473597	8.08	93	8.08	
1,4-Dichlorobenzene-d4	257827	10.38	87	10.38	

^{*} Values outside of QC limits

#### BPS1-RB02-01232012

### ORGANIC ANALYSIS DATA SHEET USEPA-8082A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water

Laboratory ID: 1201310-06

File ID: <u>A87 089-0</u>

Sampled: 01/23/12 13:30

Prepared: 01/25/12 08:27

Analyzed: 01/27/12 00:08

Solids:

Preparation: 3510C Liquid-Liquid Ext

Initial/Final: 850 mL/2 mL

QC Batch: <u>1201593</u>

Sequence: <u>2B06054</u>

Calibration: 2A20001

Instrument: <u>144</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	i	0.094	0.063	0.094	0.24	Ü
11104-28-2	PCB-1221	1	0.094	0.053	0.094	0.24	U
11141-16-5	PCB-1232	l l	0.094	0.048	0.094	0.24	U
53469-21-9	PCB-1242	ı	0.094	0.073	0.094	0.24	Ŭ
12672-29-6	PCB-1248		0.094	0.064	0.094	0.24	U
11097-69-1	PCB-1254	1	0.094	0.063	0.094	0.24	Ū
11096-82-5	PCB-1260	1	0.094	0.034	0.094	0.24	Ū
37324-23-5	PCB-1262		0.094	0.094	0.094	0.24	U
11100-14-4	PCB-1268	1	0.094	0.047	0.094	0.24	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.235	0.239	102	40 - 135	
Tetrachloro-m-xylene	0.235	0.175	74	36 - 114	

^{*} Values outside of QC limits

# INORGANIC ANALYSIS DATA SHEET USEPA-6010C

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-06

Sampled: 01/23/12 13:30

Prepared: <u>01/27/12 07:00</u>

Solids: <u>0.00</u>

Preparation: 3010A Digestion

QC Batch: 1201621 Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	lron, Total	1	12	ug/L	8.1	10	20	J	01/30/12 15:54

____ Page 17 of 20

# INORGANIC ANALYSIS DATA SHEET USEPA-6020A

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-06

Sampled: 01/23/12 13:30

Prepared: 01/27/12 07:00

Solids: <u>0.00</u>

Preparation: 3020A Digestion

QC Batch: <u>1201622</u>

Initial/Final: 25 mL/25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	]	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 16:39

# INORGANIC ANALYSIS DATA SHEET USEPA-7196A

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201310-06</u>

Sampled: 01/23/12 13:30

Prepared: 01/24/12 10:38

Solids: <u>0.00</u>

Preparation: Method-Specific Preparation

QC Batch: 1201753

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Anaiyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	ט	01/24/12 11:26

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPSI-TT-TB1019

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-9</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Water

Laboratory ID: 1110398-08

File ID: 1110398-08.D

Sampled: 10/19/11 08:00

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 17:01

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1112065

Sequence: <u>1J31056</u>

Calibration: 1J28012

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	19	0.66	1.0	10	L
71-43-2	Benzene	I	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	ı	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	ı	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	Ū
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	Ŭ
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	Ū
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	Ū
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	ı	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	i	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	Ī	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	I	0.25	0.11	0.25	1.0	Ū
106-46-7	I,4-Dichlorobenzene	l l	0.50	0.16	0.50	1.0	บ
75-71-8	Dichlorodifluoromethane	ı	0.50	0.25	0.50	1.0	υ
75-34 <b>-</b> 3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	ı	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Нехапопе	1	0.50	0.24	0.50	5.0	Ū
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	ı	0.50	0.27	0.50	5.0	Ū
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	Ü
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	<u> </u>	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	2.3	0.28	0.50	5.0	J

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPSI-TT-TB1019

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Water

Laboratory ID: 1110398-08

File ID: 1110398-08.D

Sampled: 10/19/11 08:00

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 17:01

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1112065

Sequence: <u>1J31056</u>

Calibration: 1J28012

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	Ū
127-18-4	Tetrachloroethene	]	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.070	0.057	0.10	1.0	J
87-61-6	1,2,3-Trichlorobenzene	i	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	l	0.50	0.15	0.50	2.0	Ū
71-55-6	1,1,1-Trichloroethane	ı	0.50	0.14	0.50	1.0	Ü
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	Ü
79-01-6	Trichloroethene	ì	0.50	0.18	0.50	1.0	ប
75-69-4	Trichlorofluoromethane	J	0.50	0.18	0.50	1.0	Ū
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	ប
75-01-4	Vinyl Chloride	ı	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	l	0.50	0.29	0.50	2.0	Ü
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	38.8	97	70 - 120	
Toluene-d8	40.0	38.2	95	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	670510	5.13	746237	5.13	
Chlorobenzene-d5	492287	8.08	548111	8.08	<del></del>
1,4-Dichlorobenzene-d4	260954	10.38	303977	10.38	

^{*} Values outside of QC limits

### BPS1-TB-01102012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201112-01

File ID: <u>1201112-01.D</u>

Sampled: 01/10/12 12:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 16:29

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: <u>224</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	i	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	ប
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	Ŭ
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	l	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	i	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	I	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	l l	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	i	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	ı	0.50	0.24	0.50	5.0	Ŭ
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	Ü
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	บ
108-87-2	Methylcyclohexane	i	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
, , , , , ,	2-Butanone (MEK)		0.50	0.28	0.50	5.0	U

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TB-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201112-01</u>

File ID: <u>1201112-01.D</u>

Sampled: 01/10/12 12:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 16:29

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: <u>1201389</u>

Sequence: <u>2A19006</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	rod	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	l	0.50	0.12	0.50	1.0	Ū
127-18-4	Tetrachloroethene	ı	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	Ū
87-61-6	1,2,3-Trichlorobenzene	Ī	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	I	. 0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	l	0.50	0.22	0.50	1.0	Ŭ
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.1	100	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	39.9	100	85 - 120	
4-Bromofluorobenzene	40.0	39.5	99	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	630847	5.13	94	5.13	
Chlorobenzene-d5	566164	8.08	، 94	8.08	
1,4-Dichlorobenzene-d4	309320	10.38	91	10.38	

^{*} Values outside of QC limits

#### BPS1-TB-01112012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

SDG: 50063-12

Matrix: <u>Water</u> Laboratory ID: <u>1201126-01</u> File ID: <u>1201126-01.D</u>

 Sampled: 01/11/12 08:00
 Prepared: 01/18/12 13:00
 Analyzed: 01/18/12 16:57

 Solids:
 Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

QC Dateil.	<u></u>	<u>ZF(17000</u>		<u>27110010</u>		istratione. <u>12</u>	
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	I	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	I	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	I	0.50	0.16	0.50	1.0	. U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	Ū
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	ı	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	i	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	Ü
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	ı	0.50	0.17	0.50	1.0	Ü
156-59-2	cis-1,2-Dichloroethene	ı	0.50	0.17	0.50	1.0	υ
156-60-5	trans-1,2-Dichloroethene	l	0.50	0.11	0.50	1.0	U
78-87 <b>-</b> 5	1,2-Dichloropropane	1	0.50	0:15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	υ
10061-02-6	trans-1,3-Dichloropropene	j	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	Ū
100-41-4	Ethylbenzene	ſ	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	υ
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TB-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201126-01

File ID: <u>1201126-01.D</u>

Sampled: 01/11/12 08:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 16:57

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	ı	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	ı	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	J	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	Ū
95-47-6	Xylene, Ortho	I	0.25	0.10	0.25	1.0	Ŭ

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.3	101	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	100	70 - 120	
Toluene-d8	40.0	39.8	100	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	623326	5.13	93	5.13	
Chlorobenzene-d5	562862	8.08	, 93	8.08	
1,4-Dichlorobenzene-d4	303695	10.38	89	10.38	

^{*} Values outside of QC limits

#### BPS1-TB01-01162012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201218-01

File ID: <u>1201218-01.D</u>

Sampled: <u>01/16/12 09:35</u>

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 11:00

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: <u>2A24017</u>

Calibration: 2A18010

QC Dates	QC Datelli, 1201332 Sequence: 21224017 Calibration: 27110010				modulitoris. <u>224</u>		
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67 <b>-</b> 64-1	Acetone	1	1.0	0.66	1.0	10	Ŭ
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	ı	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	I	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	Ü
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	Ü
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	I	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	l	0.25	0.094	0.25	0.1	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	I	0.50	0.15	0.50	1.0	U
541-73 <b>-</b> 1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	Ī	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	ı	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	ı	0.25	0.11	0.25	1.0	U
123-91-1	I,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	ı	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TB01-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201218-01

File ID: 1201218-01.D

Sampled: 01/16/12 09:35

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 11:00

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	Ũ
100-42-5	Styrene	I	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	I	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	I	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	Ū
87-61-6	1,2,3-Trichlorobenzene	ı	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	I	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	l I	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	Ü
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	Ū
75-69-4	Trichlorofluoromethane	l	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	Ū
95-47-6	Xylene, Ortho	l	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.8	99	85 - 115	<u> </u>
1,2-Dichloroethane-d4	40.0	39.3	98	70 - 120	
Toluene-d8	40.0	40.4	101	85 - 120	
4-Bromofluorobenzene	40.0	39.3	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	593671	5.13	99	5.13	
Chlorobenzene-d5	554448	8.08	, 97	8.08	
1,4-Dichlorobenzene-d4	306295	10.38	90 .	10.38	

^{*} Values outside of QC limits

#### BPS1-TB02-01182012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: <u>TriMatrix Laboratories, Inc.</u> SDG: <u>50063-12</u>

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: <u>Water</u> Laboratory ID: <u>1201244-01</u> File ID: <u>1201244-01.D</u>

Sampled: <u>01/18/12 08:00</u> Prepared: <u>01/24/12 08:00</u> Analyzed: <u>01/24/12 10:33</u>

Solids: Preparation: <u>5030B Aqueous Purge & Initial/Final</u>: <u>5 mL/5 mL</u>

QC Batch: <u>1201603</u> Sequence: <u>2A25008</u> Calibration: <u>2A18010</u> Instrument: <u>224</u>

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	2.5	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	Ū
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	ı	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	Ū
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	ı	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	Ū
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	Ū
75-71-8	Dichlorodifluoromethane	i	0.50	0.25	0.50	1.0	Ū
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	Ū
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	Ū
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	ı	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	ı	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	i	0.50	0.15	0.50	1.0	Ū
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.48	0.27	0.50	5.0	J
1634-04-4	Methyl tert-Butyl Ether	ı	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	i	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

Page 37 of 56

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TB02-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201244-01</u>

File ID: 1201244-01.D

Sampled: 01/18/12 08:00

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 10:33

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201603

Sequence: <u>2A25008</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	i	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	ı	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	l	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	Ū
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	l	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.1	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	40.5	101	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	542121	5.13	91	5.13	<del></del>
Chlorobenzene-d5	507994	8.08	, 92	8.08	
1,4-Dichlorobenzene-d4	269865	10.38	84	10.38	· · · · · · · · · · · · · · · · · · ·

^{*} Values outside of QC limits

### BPS1-TB03-01192012

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201254-01

File ID: <u>1201254-01.D</u>

Sampled: 01/19/12 07:45

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 14:14

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

OC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67 <b>-</b> 64-1	Acetone	l	3.0	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	0.1	U
74-83-9	Bromomethane	ı	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	Ŭ
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	Ū
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	J.	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	Ü
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	ı	0.25	0.11	0.25	1.0	ט
591-78-6	2-Hexanone	i	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	ı	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	ı	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	Ī	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TB03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201254-01

File ID: <u>1201254-01.D</u>

Sampled: 01/19/12 07:45

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 14:14

Solids:

Preparation: 5030B Aqueous Purge &

QC Batch: 1201603

Initial/Final: 5 mL/5 mL

Sequence: 2A25008

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	i	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	ı	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	ı	0.50	0.12	0.50	1.0	Ü
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	ប
120-82-1	1,2,4-Trichlorobenzene	ſ	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	ı	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	-	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	<u> </u>	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.2	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	525118	5.13	88	5.13	
Chlorobenzene-d5	495767	8.08	90	8.08	
1,4-Dichlorobenzene-d4	264019	10.38	82	10.38	

^{*} Values outside of QC limits

#### BPS1-TB04-01202012

Analyzed: 01/26/12 10:36

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: <u>1201287-01</u> File ID: <u>1201287-01.D</u> Sampled: 01/20/12 07:30 Prepared: 01/26/12 08:00

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL/5 mL

QC Batch: 1201663 Sequence: <u>2A26019</u> Calibration: 2A18010 Instrument: 224

` .	<u></u>	Canoratic	•	<del>,'1</del>			
CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.4	0.66	1.0	10	J
71-43-2	Benzene	i i	0.50	0.12	0.50	1.0	บ
74-97-5	Bromochloromethane	I	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	Ū
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	I	0.50	0.16	0.50	1.0	Ū
74-87-3	Chloromethane	<u> </u>	0.50	0.18	0.50	1.0	Ū
110-82-7	Cyclohexane	i	0.50	0.29	0.50	5.0	Ü
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	ī	0.25	0.094	0.25	1.0	บ
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	Ū
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	Ü
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	Ū
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	I	0.50	0.11	0.50	1.0	Ü
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	Ū
10061-01-5	cis-1,3-Dichloropropene	ī	0.10	0.050	0.10	1.0	Ū
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	0.1	U
591-78-6	2-Hexanone	I	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	ı	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	I	0.50	0.27	0.50	5.0	Ū
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	ı	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	Ŭ
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TB04-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201287-01

File ID: 1201287-01.D

Sampled: 01/20/12 07:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 10:36

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	Ū
100-42-5	Styrene	i i	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	ı	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	Ü
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	l	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	ı	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane		0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	I	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	0.1	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth ane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	บ
95-47-6	Xylene, Ortho	I	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.2	98	70 - 120	<del></del>
Toluene-d8	40.0	40.8	102	85 - 120	<del></del>
4-Bromofluorobenzene	40.0	38.4	96	75 - 120	

Internal Standard	Агеа	RT	% REC.	Ref. RT	Q
Fluorobenzene	521127	5.13	98	5.13	
Chlorobenzene-d5	489374	8.08	96	8.08	
1,4-Dichlorobenzene-d4	262068	10.38	89	10.38	

^{*} Values outside of QC limits

#### BPS1-TB05-01232012

## ORGANIC ANALYSIS DATA SHEET USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201310-01</u>

File ID: 1201310-01.D

Sampled: 01/23/12 07:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:04

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	2.8	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	I	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	. 1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	ı	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	Ī	0.50	0.15	0.50	0.1	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	I	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	I	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	01	25	50	τ
100-41-4	Ethylbenzene	- 1	0.25	0.11	0.25	1.0	L
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	Ţ
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	ι
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	l
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	J
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	J
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	J
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	ι

### ORGANIC ANALYSIS DATA SHEET USEPA-8260B

BPS1-TB05-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: <u>50063-13</u>

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: <u>1201310-01</u>

File ID: <u>1201310-01.D</u>

Sampled: 01/23/12 07:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:04

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL/5 mL

QC Batch: 1201663

Sequence: <u>2A26019</u>

Calibration: 2A18010

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	Ì	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	0.1	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	Ū
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0,50	0.15	0.50	1.0	Ū
79-01-6	Trichloroethene	l	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	]	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.7	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	512195	5.13	97	5.13	
Chlorobenzene-d5	480926	8.08	95	8.08	
1,4-Dichlorobenzene-d4	260078	10.38	88	10.38	

^{*} Values outside of QC limits

Appendix D
Validation Summaries



### INTERNAL CORRESPONDENCE

TO: R. SOK DATE: FEBRUARY 17, 2012

FROM: A. COGNETTI COPIES: DV FILE

SUBJECT: ORGANIC AND INORGANIC DATA VALIDATION - VOC / PCB / METALS /

MISCELLANOUS

**NWIRP BETHPAGE CTO WE44** 

SAMPLE DELIVERY GROUP (SDG) - 50063-9

SAMPLES: 3/Aqueous/VOC

BPSI-SW3001 BPSI-SW3002 BPSI-TT-TB1019

5/Soil/PCB

BPSI-TT-MW309-0005 BPSI-TT-MW309-0510 BPSI-TT-MW309-1015

BPSI-TT-MW309-1520 BPSI-TT-MW309-2025

2/Aqueous/PCB/Metals

BPSI-SW3001 BPSI-SW3002

#### Overview

The sample set for NWIRP Bethpage, CTO WE44, SDG 50063-9 consists of two (2) aqueous environmental samples and a trip blank analyzed for volatile organic compounds (VOCs). Five (5) soil environmental samples and two (2) aqueous environmental samples were analyzed for polychlorinated biphenyls (PCBs). Two (2) aqueous environmental samples were analyzed for iron, total chromium and dissolved hexavalent chromium. The soil samples were analyzed for percent solids.

The samples were collected by Tetra Tech on October 19, 2011 and analyzed by Trimatrix Laboratories. Analyses were conducted in accordance with EPA Methods SW-846 8260B, 8082, 6010C, 6020A, 7196A and 3550B analysis and reporting protocol. The data contained in this SDG were validated with regard to the following parameters:

- Data completeness
- Holding times
  - GC/MS Tuning
    - Initial/continuing calibrations
- Laboratory Method Blank/Field Blank Results
- Surrogate Recoveries
- Matrix Spike / Matrix Spike Duplicate Recoveries
- Laboratory Control Sample Recoveries
- Internal Standard Recoveries
  - ICP Interference Results
- ICP Serial Dilution Results
  - Compound Quantitation
    - Compound Identification
- Detection Limits

TO: R. Sok

FROM: A. Cognetti SDG: 50063-9

DATE: February 17, 2012

PAGE: 2

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

#### Volatile

In the initial and continuing calibrations on October 27, 2011 and October 31, 2011@ 8:11, 1,4-dioxane had a relative retention factor (RRF) less than the 0.05 quality control limit. The nondetected 1,4-dioxane results were qualified as rejected (UR) in the affected samples.

In the continuing calibration on October 31, 2011 @ 8:11, bromomethane and 2-hexanone had percent differences (%Ds) greater than the 20% quality control limit. The nondetected bromomethane and 2-hexanone results were qualified as estimated (UJ) in the affected samples.

Contamination was detected in the trip blank, BPSI-TT-TB1019.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
2-butanone	2.3	23
Acetone	19	190
Toluene	0.07	0.35

An action level of 10X the maximum concentration of common laboratory contaminants, acetone and 2-butanone, and 5X the maximum concentration of toluene was established on order to evaluate samples for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into account when applying the action level. Positive results less than the action level were qualified as (U).

### PCB

All detected Aroclor 1248 results were qualified as estimated (J) because the laboratory indicated that a conclusive PCB Aroclor identification was not possible due to matrix interference and/or weathering of the sample. Method blank chromatograms did not indicate any contamination was present. The data reviewer examined the pattern and agreed with the laboratory regarding the Aroclor 1248 identification even though the pattern appears likely to contain another Aroclor mixture.

### **Additional Comments**

Sample BPSI-TT-TB1019 was not listed on the chain of custody. The sample was added onto the chain of custody per Tetra Tech's request.

Contamination was detected in the continuing calibration blanks and method blank in the metals fraction.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Iron (1)	9.0	45.0
Chromium (2)	-0.21	1.05

- (1) Maximum concentration detected in method blank associated with batch 1112149.
- (2) Maximum concentration detected in continuing calibration blank 2 analyzed on November 4, 2011 @ 8:21.

TO: R. Sok

FROM: A. Cognetti

SDG: 50063-9

DATE: February 17, 2012

PAGE: 3

An action level of 5X the maximum concentration was established on order to evaluate samples for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into account when applying the action level. No action was taken for the negative signal drift for chromium because the negative value was greater than the negative limit of detection.

The serial dilution %Ds for iron and chromium were greater than the 10% quality control limit. No action was taken because the sample concentration was less than 50X the IDL.

Positive results below the Reporting Limit (RL) and above the detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

Nondetected results are reported to the limit of detection (LOD).

### **EXECUTIVE SUMMARY**

**Laboratory Performance Issues:** 1,4-dioxane had a RRF less than the 0.05 quality control limit resulting in the rejection of nondetected results. Bromomethane and 2-hexanone had %Ds greater than the 20% quality control limit resulting in the qualification of data. All detected Aroclor 1248 results were qualified as estimated (J) because the laboratory indicated that a conclusive PCB Aroclor identification was not possible due to matrix interference and/or weathering of the sample.

Other Factors Affecting Data Quality: BPSI-TT-TB1019 contained acetone, 2-butanone and toluene.

The data for these analyses were reviewed with reference to SOP # HW-24 Revision #2, August 2008, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846/8260B, SOP # HW-45 Revision #1, October 2006, USEPA Region II Hazardous Waste Support Branch Validating PCB Compounds by Gas Chromatography SW-846 Method 8082A, SOP# HW-2, Revision 13, September 2006, Validation of Metals for the Contract Laboratory Program (CLP) based on the SOW ILM05.3, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

TO: R. Sok

FROM: A. Cognetti

SDG: 50063-9

DATE: February 17, 2012

PAGE: 4

The text of this report has been formulated to address only those problem areas affecting data quality.

Ann Cognetti

Chemist/Data Validator

Tetra Tech

Joseph A. Samchuck

Data Validation Quality Assurance Officer

## Attachments:

- Appendix A Qualified Analytical Results 1.
- Appendix B Results as Reported by the Laboratory 2.
- 3. Appendix C - Region II Data Validation Forms
- Appendix D Support Documentation 4.

# Appendix A

Qualified Analytical Results

### **Qualifier Codes:**

A = Lab Blank Contamination

B = Field Blank Contamination

C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)

C01 = GC/MS Tuning Noncompliance

D = MS/MSD Recovery Noncompliance

E = LCS/LCSD Recovery Noncompliance

F = Lab Duplicate Imprecision

G = Field Duplicate Imprecision

H = Holding Time Exceedance

I = ICP Serial Dilution Noncompliance

J = ICP PDS Recovery Noncompliance; MSA's r < 0.995

K = ICP Interference - includes ICS % R Noncompliance

L = Instrument Calibration Range Exceedance

M = Sample Preservation Noncompliance

N = Internal Standard Noncompliance

N01 = Internal Standard Recovery Noncompliance Dioxins

N02 = Recovery Standard Noncompliance Dioxins

N03 = Clean-up Standard Noncompliance Dioxins

O = Poor Instrument Performance (i.e., base-time drifting)

P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)

Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)

R = Surrogates Recovery Noncompliance

S = Pesticide/PCB Resolution

T = % Breakdown Noncompliance for DDT and Endrin

U = RPD between columns/detectors >40% for positive results determined via GC/HPLC

V = Non-linear calibrations; correlation coefficient r < 0.995

W = EMPC result

X = Signal to noise response drop

Y = Percent solids <30%

Z = Uncertainty at 2 sigma deviation is less than sample activity

Z1 = Tentatively Identified Compound considered presumptively present

Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPSI-SW3001			BPSI-SW3002			BPSI-TT-TB10	)19	
SDG: 50063-9	LAB_ID	1110398-01			1110398-02			1110398-08		
FRACTION: OV	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0	•		0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHA	NE	0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLORO	ETHANE	0.5	IJ		0.5	U		0.5	U	
1,1,2-TRICHLOROETHA	ANE	0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIF	LUOROETHANE	0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	Ü		0.5	U	
1,2,3-TRICHLOROBENZ	ZENE	0.5	U		0.5	U		0.5	Ü	
1,2,4-TRICHLOROBENZ	ZENE	0.5	IJ		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOF	ROPROPANE	0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	J		0.25	U		0.25	U	
1,2-DICHLOROBENZEN	IE	0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	J		0.5	U		0.5	U	
1,2-DICHLOROPROPAN	NE.	0.5	J		0.5	U		0.5	U	
1,3-DICHLOROBENZEN	IE	0.25	J		0.25	U		0.25	U	
1,4-DICHLOROBENZEN	IE	0.5	J		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	С	25	UR	С	25	UR	С
2-BUTANONE		0.5	U		0.5	U		2.3	J	Р
2-HEXANONE		0.5	UJ	С	0.5	UJ	С	0.5	UJ	С
4-METHYL-2-PENTANC	NE	0.5			0.5	υ		0.5	U	
ACETONE		1	J		1	υ	В	19		
BENZENE		0.5	C		0.5	U		0.5	U	
BROMOCHLOROMETH	ANE	0.5	۲		0.5	U		0.5	U	
BROMODICHLOROMET	THANE	0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	Ü		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	С	0.5	UJ	С	0.5	UJ	С
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLO	RIDE	0.5			0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMET	THANE	0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5			0.5	U		0.5	1	
CHLOROFORM		0.5	U	1	0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETH	IENE	0.5	U	1	0.5	U		0.5	U	
CIS-1,3-DICHLOROPRO	PENE	0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U	

1 of 2

PROJ_NO: 02230	NSAMPLE	BPSI-SW3001			BPSI-SW3002			BPSI-TT-TB1019			
SDG: 50063-9	LAB_ID	1110398-01			1110398-02	1110398-02			1110398-08		
FRACTION: OV	SAMP_DATE	10/19/2011	-		10/19/2011	10/19/2011			10/19/2011		
MEDIA: WATER	QC_TYPE	NM			NM			NM			
	UNITS	UG/L			UG/L			UG/L			
	PCT_SOLIDS	0.0			0.0			0.0			
	DUP_OF										
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DICHLORODIFLUORON	METHANE	0.5	U		0.5	U		0.5	U		
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		
M+P-XYLENES		0.5	U		0.5	U		0.5	U		
METHYL ACETATE		0.5	U		0.5	U		0.5	U		
METHYL CYCLOHEXAN	NE	0.5	U		0.5	U		0.5	U		
METHYL TERT-BUTYL	ETHER	0.5	U		0.5	U		0.5	U		
METHYLENE CHLORID	Ε	0.5	U		0.5	U		0.5	U		
O-XYLENE		0.25	U		0.25	U		0.25	U		
STYRENE		0.1	U		0.1	U		0.1	U		
TETRACHLOROETHEN	IE .	0.5	U		0.5	U		0.5		1	
TOLUENE		0.1	U		0.1	U		0.07		Р	
TRANS-1,2-DICHLORO	ETHENE	0.5	U		0.5	U		0.5	U		
TRANS-1,3-DICHLORO	PROPENE	0.25	U		0.25	U		0.25	U		
TRICHLOROETHENE		0.5	U		0.5	U		0.5	U		
TRICHLOROFLUOROM	IETHANE	0.5	U		0.5	U		0.5	U		
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		

PROJ_NO: 02230	NSAMPLE	BPSI-TT-MW3	309-000	5	BPSI-TT-MW3	309-000	5RE1	BPSI-TT-MW3	09-051	0	BPSI-TT-MW3	309-051	0RE1
SDG: 50063-9	LAB_ID	1110398-06			1110398-06RI	≣1		1110398-07			1110398-07R	Ε1	
FRACTION: PCB	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011			10/19/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM	•		NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	96.0			96.0			96.0			96.0		
	DUP_OF		••										
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.017	U					0.017	U				
AROCLOR-1221		0.017	U					0.017	U				
AROCLOR-1232		0.007	U					0.007	U				
AROCLOR-1242		0.017	U					0.017	U				
AROCLOR-1248					1.3	J	Q				0.72	J	Q
AROCLOR-1254		0.007	U					0.007	U				
AROCLOR-1260		0.017	U					0.017	U				
AROCLOR-1262		0.007	U					0.007	U				
AROCLOR-1268		0.007	U					0.007	U				

2/17/2012

PROJ_NO: 02230	NSAMPLE	BPSI-TT-MW3	09-101	5	BPSI-TT-M\	N309-101	I5RE1	BPSI-TT-MW3	09-152	0	BPSI-TT-M\	N309-152	20RE1
SDG: 50063-9	LAB_ID	1110398-05			1110398-05	RE1		1110398-03			1110398-03	RE1	
FRACTION: PCB	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011			10/19/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	95.0			95.0			96.0			96.0		
	DUP_OF				1 2 2 2 2								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.018	U					0.017	U				
AROCLOR-1221		0.018	U					0.017	U				
AROCLOR-1232	•	0.007	U					0.007	J				
AROCLOR-1242		0.018	U					0.017	J				
AROCLOR-1248						7 J	Q				2	2.9 J	Q
AROCLOR-1254		0.007	U					0.007	U				
AROCLOR-1260		0.018	U					0.017	U				
AROCLOR-1262	·	0.007	U					0.007	U				
AROCLOR-1268		0.007	U					0.007	U				

2 of 3 2/17/2012

PROJ_NO: 02230	NSAMPLE	BPSI-TT-MW3	09-2025	5	BPSI-TT-MW3	09-202	5RE1	
SDG: 50063-9	LAB_ID	1110398-04			1110398-04RE1			
FRACTION: PCB	SAMP_DATE	10/19/2011			10/19/2011			
MEDIA: SOIL	QC_TYPE	NM			NM			
	UNITS	MG/KG			MG/KG			
	PCT_SOLIDS	97.0			97.0			
	DUP_OF							
PARAMETER	•	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
AROCLOR-1016		0.017	U					
AROCLOR-1221		0.017	U					
AROCLOR-1232		0.0069	U					
AROCLOR-1242		0.017	U					
AROCLOR-1248					0.46	J	Q	
AROCLOR-1254		0.0069	U					
AROCLOR-1260		0.017	U					
AROCLOR-1262		0.0069	U					
AROCLOR-1268		0.0069	U					

PROJ_NO: 02230	NSAMPLE	BPSI-SW3001	BPSI-SW3001			01RE1		BPSI-SW300	2		
SDG: 50063-9	LAB_ID	1110398-01			1110398-01	1110398-01RE1			1110398-02		
FRACTION: PCB	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011			
MEDIA: WATER	QC_TYPE	NM			NM			NM			
	UNITS	UG/L			UG/L			UG/L			
	PCT_SOLIDS	0.0			0.0			0.0			
	DUP_OF						· • • • • • • • • • • • • • • • • • • •				
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
AROCLOR-1016		0.08	U					0.1	U		
AROCLOR-1221		0.08	U					0.1	U		
AROCLOR-1232		0.08	U					0.1	U		
AROCLOR-1242		0.08	U					0.1	U		
AROCLOR-1248					0.:	35 J	Q	0.1	U		
AROCLOR-1254		0.08	U					0.1	U		
AROCLOR-1260		0.08	IJ					0.1	U		
AROCLOR-1262		0.08	U					0.1	U		
AROCLOR-1268		0.08	U					0.1	U		

PROJ_NO: 02230	NSAMPLE	BPSI-SW3001			BPSI-SW3002			
SDG: 50063-9	LAB_ID	1110398-01			1110398-02			
FRACTION: M	SAMP_DATE	10/19/2011			10/19/2011			
MEDIA: WATER	QC_TYPE	NM			NM			
	UNITS	UG/L			UG/L			
	PCT_SOLIDS	0.0			0.0			
	DUP_OF			**				
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	
CHROMIUM		2.4			0.84	J	Р	
IRON		240			150			

PROJ_NO: 02230	NSAMPLE	BPSI-SW300			BPSI-SW3002	2	
SDG: 50063-9	LAB_ID	1110398-01			1110398-02		
FRACTION: MISC	SAMP_DATE	10/19/2011			10/19/2011		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROM	IIUM	0.4	. J	Р	0.4	J	P



## **Tetra Tech INC**

## INTERNAL CORRESPONDENCE

TO:

R. SOK

DATE:

**MARCH 28, 2012** 

FROM:

**JOSEPH KALINYAK** 

**COPIES:** 

**DV FILE** 

**SUBJECT:** 

ORGANIC DATA VALIDATION - VOC. PCB

**NWIRP BETHPAGE, CTO WE44** 

**SAMPLE DELIVERY GROUP SDG 50063-12** 

SAMPLES:

27 / Aqueous / VOC

BPS1-Dup01-01172012	BPS1-FB01-01182012	BPS1-FW-MW02-01172012
BPS1-RB01-01182012	BPS1-TB-01102012	BPS1-TB-01112012
BPS1-TB01-01162012	BPS1-TB02-01182012	BPS1-TT-Dup02-01182012
BPS1-TT-MW301D-01172012	BPS1-TT-MW301I-01172012	BPS1-TT-MW301S-01172012
BPS1-TT-MW304I1-01182012	BPS1-TT-MW304S-01182012	BPS1-TT-MW305D-01172012
BPS1-TT-MW305I-01172012	BPS1-TT-MW305S-01172012	BPS1-TT-MW307D-01182012
BPS1-TT-MW307I-01182012	BPS1-TT-MW307S-01182012	BPS1-TT-MW308D-01162012
BPS1-TT-MW308I-01162012	BPS1-TT-MW308S-01162012	BPS1-TT-MW309D-01112012
BPS1-TT-MW309I-01112012	BPS1-TT-MW309S-01102012	BPS1-TTMW-304I2-01182012

### 23 / Aqueous / PCB

BPS1-Dup01-01172012	BPS1-FB01-01182012	BPS1-FW-MW02-01172012
BPS1-RB01-01182012	BPS1-TT-Dup02-01182012	BPS1-TT-MW301D-01172012
BPS1-TT-MW301I-01172012	BPS1-TT-MW301S-01172012	BPS1-TT-MW304I1-01182012
BPS1-TT-MW304S-01182012	BPS1-TT-MW305D-01172012	BPS1-TT-MW305I-01172012
BPS1-TT-MW305S-01172012	BPS1-TT-MW305D-01182012	BPS1-TT-MW307I-01182012
BPS1-TT-MW307S-01182012 BPS1-TT-MW308S-01162012 BPS1-TT-MW309S-01102012	BPS1-TT-MW308D-01162012 BPS1-TT-MW309D-01112012 BPS1-TTMW-304I2-01182012	BPS1-TT-MW308I-01162012 BPS1-TT-MW309I-01112012

### **Overview**

The sample set for NWIRP Bethpage, CTO WE44, SDG 50063-12 consisted of twenty-seven (27) aqueous samples, including one (1) aqueous rinse blank sample, one (1) aqueous field blank sample, and four (4) aqueous trip blank samples. All of the aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. Twenty-three (23) of the aqueous samples were analyzed for polychlorinated biphenyls (PCB) as listed above. Two field duplicate sample pairs were included with this sample delivery group (SDG): BPS1-Dup01-01172012 / BPS1-TT-MW305S-01172012 and BPS1-TT-Dup02-01182012 / BPS1-TTMW-304I2-01182012.

The samples were collected by Tetra Tech on January 10, 11, 16, 17, and 18, 2012 and analyzed by Trimatrix Laboratories Inc. All analyses were conducted in accordance with EPA Methods SW-846 8260B for VOC and 8082 for PCB, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

- Data completeness
- Hold times
  - GC/MS System Tuning and Performance
  - Initial/continuing Calibrations

TO: R. SOK PAGE: 2

SDG: 50063-12

Method Blank Results

Laboratory Control Sample Recovery

- Matrix Spike/Matrix Spike Duplicate Recoveries
- Surrogate Spike Recoveries
- Internal Standard Recoveries
- Field Duplicate Precision
- Compound Identification
  - Compound Quantitation
- * Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

### **VOC**

The following VOC contaminant was detected in the method blank at the following maximum concentrations.

a attorio.		
	<u>Maximum</u>	<u>Action</u>
<u>Analyte</u>	Conc. µg/L	Level µg/L
Methyl acetate (1)	0.32	1.60

Method blank for batch 1201603 affecting samples BPS1-TT-MW301I-01172012, BPS1-FW-MW02-01172012, BPS1-TB02-01182012, BPS1-FB01-01182012, BPS1-TT-MW307D-01182012, BPS1-TT-MW304S-01182012, and BPS1-TT-MW307S-01182012.

An action level of five times the maximum level for methyl acetate has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results less than the action level were qualified non-detected, (U). Acetone was detected in the trip blank samples BPS1-TB02-01182012. As none of the samples had positive acetone detections, no validation action for trip blank acetone contamination was necessary.

The initial calibration average relative response factor (RRF) was less than the 0.05 quality control limit for 1,4-dioxane for instrument 224 on 01/17/12 and on all continuing calibration verifications (CCV).

**Affected samples**: All samples

Action: The non-detected 1,4-dioxane results for all samples were qualified rejected, (UR).

The continuing calibration verification (CCV) %Ds were greater than the 20% quality control limit for bromomethane and 1,4-dioxane for instrument 224 on 01/23/11 @ 09:09 affecting the samples listed.

## Affected samples:

BPS1-TB01-01162012	BPS1-TT-MW308D-01162012	BPS1-TT-MW308I-01162012
BPS1-TT-MW308S-01162012	BPS1-TT-MW301D-01172012	BPS1-TT-MW305S-01172012
BPS1-TT-MW301S-01172012	BPS1-TT-MW305I-01172012	BPS1-TT-MW305D-01172012
BPS1-TT-MW304I1-01182012	BPS1-TT-MW307I-01182012	BPS1-TTMW-304I2-01182012
BPS1-TT-Dup02-01182012	BPS1-Dup01-01172012	

**Action:** The non-detected bromomethane results for the samples were qualified estimated, (UJ). No validation action was necessary for the non-detected 1,4-dioxane sample results as they were qualified rejected as previously describe for an RRF quality control limit non-compliances.

TO: R. SOK PAGE: 3

SDG: 50063-12

The CCV %Ds were greater than the 20% quality control limit for bromomethane and dichlorodifluoromethane for instrument 224 on 01/24/11 @ 08:42 affecting the samples listed.

### Affected samples:

BPS1-TB02-01182012 BPS1-FB01-01182012 BPS1-RB01-01182012

BPS1-TT-MW307D-01182012 BPS1-TT-MW304S-01182012

BPS1-TT-MW307S-01182012 BPS1-TT-MW301I-01172012 BPS1-FW-MW02-01172012

BPS1-TT-MW305I-01172012RE dilution re-analysis

**Action:** The sample non-detected bromomethane and dichlorodifluoromethane results were qualified estimated, (UJ). The sample BPS1-TT-MW305I-01172012RE dilution re-analysis results were not qualified as only the trichloroethene results was reported from the sample re-analysis.

### **PCB**

The samples BPS1-TT-MW301D-01172012 (25.2%) and BPS1-TT-MW305D-01172012 (35.1%) had relative percent differences (RPD) between the two analytical column Aroclor-1242 positive results greater than the 25% quality control limit. The aforementioned sample positive Aroclor-1242 results were qualified estimated, (J).

All method blanks were clean (non-detected for all Aroclors).

### Additional Comments

The sample BPS1-TT-MW305I-01172012 VOC tetrachloroethene result exceeded the highest calibration standard for the sample undiluted analysis. The sample was re-analyzed at a 50X dilution. Only the tetrachloroethene result was reported from the sample BPS1-TT-MW305I-01172012 50X dilution analysis.

Samples were diluted for the Aroclor-1248 analysis as listed below.

Sample	Dilution
BPS1-TT-Dup02-01182012	2X
BPS1-TT-MW301S-01172012	10X
BPS1-TT-MW305I-01172012	2X
BPS1-TTMW-304I2-01182012	2X

The rinse blank sample BPS1-RB01-01182012 and field blank sample BPS1-FB01-01182012 had positive detections for trichloroethene. Trichloroethene was not detected in any of the trip blanks and laboratory method blanks. No validation action was taken by the data reviewer for field or rinse blank contamination.

The DB-35 column (column 1) results were reported by the laboratory for the positive Aroclor results.

The laboratory did not provide Aroclor %Ds for all of the CCVs. The data validation chemist manually calculated the CCV %Ds to verify that they were quality control compliant.

Surrogate results were diluted out in the sample BPS1-TT-MW301S-01172012 10X dilution Aroclor-1248 analysis.

Sample VOC and Aroclor analyte results were reported to the Limit of Detection (LOD).

Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

TO: R. SOK

SDG: 50063-12

### **EXECUTIVE SUMMARY**

**Laboratory Performance Issues:** VOC sample analyte results were qualified for initial calibration RRF and CCV %D quality control limit non-compliances.

PAGE: 4

Other Factors Affecting Data Quality: Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit. Sample positive Aroclor results were qualified due to analytical column RPD quality control limit non-compliances.

The data for these analyses were reviewed with reference to the SOP HW-24 Revision #2 - August 2008 Validating Volatile Organic Compounds by SW-846 Method 8260B, SOP HW-45 Revision 1 - October 2006 Data Validation SOP of Organic Analysis of PCBs by Gas Chromatography, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

TetraTech Joseph Kalinyak

Chemist/Data Validator

,TetraTech

Joseph A. Samchuck

Data Validation Quality Assurance Officer

Attachments:

Appendix A - Qualified Analytical Results

Appendix B - Results as Reported by the Laboratory

Appendix C - Region II Data Validation Forms

Appendix D - Support Documentation

# Appendix A

Qualified Analytical Results

## Value Qualifier Key (Val Qual)

- $\overline{J}$  The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- U Value is a non-detect as reported by the laboratory.
- UR Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

## DATA QUALIFICATION CODE (QUAL CODE)

### **Qualifier Codes:**

A = Lab Blank Contamination

B = Field Blank Contamination

C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)

C01 = GC/MS Tuning Noncompliance

D = MS/MSD Recovery Noncompliance

E = LCS/LCSD Recovery Noncompliance

F = Lab Duplicate Imprecision

G = Field Duplicate Imprecision

H = Holding Time Exceedance

I = ICP Serial Dilution Noncompliance

J = ICP PDS Recovery Noncompliance; MSA's r < 0.995

K = ICP Interference - includes ICS % R Noncompliance

L = Instrument Calibration Range Exceedance

M = Sample Preservation Noncompliance

N = Internal Standard Noncompliance

N01 = Internal Standard Recovery Noncompliance Dioxins

N02 = Recovery Standard Noncompliance Dioxins

N03 = Clean-up Standard Noncompliance Dioxins

O = Poor Instrument Performance (i.e., base-time drifting)

P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)

Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)

R = Surrogates Recovery Noncompliance

S = Pesticide/PCB Resolution

T = % Breakdown Noncompliance for DDT and Endrin

U = RPD between columns/detectors >40% for positive results determined via GC/HPLC

V = Non-linear calibrations; correlation coefficient r < 0.995

W = EMPC result

X = Signal to noise response drop

Y = Percent solids <30%

Z = Uncertainty at 2 sigma deviation is less than sample activity

Z1 = Tentatively Identified Compound considered presumptively present

Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPS1-Dup0	1-011720	12	BPS1-FB01	-0118201	2	BPS1-FW-MV	V02-011	72012	BPS1-RB01-0	118201	2
SDG: 50063-12	LAB_ID	1201218-12	)		1201244-02			1201218-11			1201244-03		
FRACTION: OV	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		_
	PCT SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-M	W305S-0	1172012									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHAN	E	(	).5 U		С	.5 U		0.39	J	Р	0.5	U	
1,1,2,2-TETRACHLOROET		(	).5 U			.5 U		0.5			0.5		
1,1,2-TRICHLOROETHAN	E	(	).5 U			.5 U		0.5	U		0.5	1	
1,1,2-TRICHLOROTRIFLU	OROETHANE	(	).5 U			.5 U		0.36		Р	0.5	1	
1,1-DICHLOROETHANE		(	).5 U		C	.5 U		0.5	U		0.5		
1,1-DICHLOROETHENE		(	).5 U			.5 U			U		0.5	U	
1,2,3-TRICHLOROBENZEI	NE	(	).5 U			.5 U		0.5			0.5		
1,2,4-TRICHLOROBENZE	NE	(	).5 U		C	.5 U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLORO	PROPANE	(	).5 U			.5 U		0.5	υ		0.5		
1,2-DIBROMOETHANE		0.	25 U		0.	25 U		0.25	U		0.25		
1,2-DICHLOROBENZENE			).5 U		C	.5 U			U		0.5	U	
1,2-DICHLOROETHANE		(	).5 U		1	.5 U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		(	).5 U		C	.5 U			i U		0.5	U	
1,3-DICHLOROBENZENE		0.	25 U		0.	25 U		0.25	U		0.25		
1,4-DICHLOROBENZENE		(	).5 U		C	.5 U			U		0.5		
1,4-DIOXANE			25 UR	С		25 UR	С		UR	С		UR	С
2-BUTANONE		(	).5 U			.5 U			U		0.5	U	
2-HEXANONE		7	).5 U		C	.5 U			i U		0.5	U	
4-METHYL-2-PENTANONI	E	(	).5 U		C	.5 U			U		0.5		
ACETONE			1 U			1 U		1	U			U	
BENZENE		(	).5 U			.5 U		0.5	5 U		0.5		
BROMOCHLOROMETHAN	NE.	(	).5 U		C	.5 U			υ		0.5	1	
BROMODICHLOROMETH	ANE	(	).5 U			).5 U			5 U		0.5		
BROMOFORM		0.	25 U			25 U		0.25			0.25		
BROMOMETHANE		(	).5 UJ	С		.5 UJ	С		UJ	С		UJ	С
CARBON DISULFIDE			).5 U			.5 U			U		0.5	1	
CARBON TETRACHLORIE	DE	(	).5 U			.5 U			5 U		0.5	<del></del>	
CHLOROBENZENE			).5 U		_ +	.5 U			5 U		0.5		
CHLORODIBROMOMETH	ANE	0.	25 U			25 U		0.25			0.25		
CHLOROETHANE			).5 U			).5 U			5 U		0.5	1	
CHLOROFORM		(	).5 U			).5 U			5 U		0.5		1
CHLOROMETHANE		(	).5 U			).5 U			5 U		0.5		
CIS-1,2-DICHLOROETHEI	NE		).5 U			).5 U			5 U		0.5	-	
CIS-1,3-DICHLOROPROP	ENE		).1 U			).1 U	1		U		0.1	<del> </del>	
CYCLOHEXANE		(	0.5 U			).5 U		0.5	5 U		0.5	U	

1 of 14

PROJ_NO: 02230	NSAMPLE	BPS1-TB01-0	1162012	2	BPS1-TB-011	02012		BPS1-TB-011	2012		BPS1-TB02-01	18201	2
SDG: 50063-12	LAB_ID	1201218-01			1201112-01			1201126-01			1201244-01	-	
FRACTION: OV	SAMP_DATE	1/16/2012		<u>-</u>	1/10/2012			1/11/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF									-			
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	Ē	0.5	U		0.5	U		0.5			0.5	U	
1,1,2,2-TETRACHLOROET	HANE	0.5	U		0.5	U		0.5			0.5	U	
1,1,2-TRICHLOROETHANE	Ē	0.5	U		0.5			0.5			0.5	_	
1,1,2-TRICHLOROTRIFLU	OROETHANE	0.5	U		0.5			0.5	U		0.5		
1,1-DICHLOROETHANE		0.5	บ		0.5			0.5			0.5		
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5			0.5		
1,2,3-TRICHLOROBENZEN	NE	0.5	U		0.5			0.5			0.5		
1,2,4-TRICHLOROBENZEN	NE	0.5			0.5			0.5			0.5		
1,2-DIBROMO-3-CHLORO	PROPANE	0.5			0.5			0.5			0.5		
1,2-DIBROMOETHANE		0.25	U		0.25	L		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5			0.5		
1,2-DICHLOROETHANE		0.5	U		0.5			0.5			0.5		
1,2-DICHLOROPROPANE		0.5	U		0.5	U	<u> </u>	0.5			0.5		
1,3-DICHLOROBENZENE		0.25			0.25			0.25			0.25		
1,4-DICHLOROBENZENE		0.5			0.5	t		0.5			0.5		
1,4-DIOXANE		25	UR	С		UR	С		UR	С		UR	С
2-BUTANONE		0.5	U		0.5	,		0.5			0.5		
2-HEXANONE		0.5			0.5			0.5			0.5		
4-METHYL-2-PENTANONE	<u></u>	0.5	U		0.5	I	1	0.5			0.5	1	
ACETONE			U			U	<u></u>		U		2.5		Р
BENZENE		0.5	U		0.5	1		0.5			0.5		
BROMOCHLOROMETHAN	IE	0.5			0.5	i		0.5			0.5		
BROMODICHLOROMETHA	ANE	0.5			0.5	+		0.5			0.5		
BROMOFORM		0.25			0.25	<del>}</del>		0.25			0.25		
BROMOMETHANE		0.5	UJ	С	0.5	<del></del>		0.5			0.5		С
CARBON DISULFIDE		0.5	U		0.5			0.5			0.5		
CARBON TETRACHLORID	DE	0.5			0.5	1		0.5		=	0.5	+	<u> </u>
CHLOROBENZENE		0.5	U		0.5			0.5			0.5		
CHLORODIBROMOMETHA	ANE	0.25			0.25			0.25			0.25		
CHLOROETHANE		0.5			0.5			0.5			0.5		
CHLOROFORM		0.5	_		0.5			0.5			0.5		
CHLOROMETHANE		0.5			0.5			0.5			0.5		
CIS-1,2-DICHLOROETHEN		0.5			0.5			0.5		<u> </u>	0.5		
CIS-1,3-DICHLOROPROPI	ENE	0.1			0.1			0.1			0.1	<del></del>	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

2 of 14 3/28/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-Dup	02-0118	2012	BPS1-TT-MW	301D-01	1172012	BPS1-TT-MW	3011-01	172012	BPS1-TT-MW	/301S-0	1172012
SDG: 50063-12	LAB_ID	1201244-10	-		1201218-05			1201218-09			1201218-07	•	
FRACTION: OV	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012	-	
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM	-	
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0	***	
	DUP_OF	BPS1-TTMW-	30412-0	1182012									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.23	J	Р	0.53	J	Р	0.5	U		0.5	Ü	
1,1,2,2-TETRACHLOROET	HANE	0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE	=	0.5	Ü		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUO	OROETHANE	0.5	U		0.5	U		0.5	U		0.5	i U	
1,1-DICHLOROETHANE		0.5	U		0.22	j	Р	0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	1
1,2,3-TRICHLOROBENZEN	1E	0.5	U		0.5	U		0.5				U	
1,2,4-TRICHLOROBENZEN	1E	0.5	U		0.5	U		0.5				เ∣บ	
1,2-DIBROMO-3-CHLORO	PROPANE	0.5	U		0.5	U		0.5	U			U	
1,2-DIBROMOETHANE		0.25	U		0.25	Ū		0.25	U		0.25		
1,2-DICHLOROBENZENE		0.5	υ		0.5	U		0.5	U			i U	
1,2-DICHLOROETHANE		0.5	U		0.5			0.5	U			υ	
1,2-DICHLOROPROPANE	-	0.5	U		0.5	U		0.5	ļ			ijU	
1,3-DICHLOROBENZENE		0.25	U		0.25	·		0.25	U	1	0.25		
1,4-DICHLOROBENZENE		0.5	U		0.5			0.5				U	
1,4-DIOXANE		25	UR	С	25	UR	С	25	UR	С		UR	С
2-BUTANONE		0.5	U		0.5	<u>.                                    </u>		0.5	_			5 U	
2-HEXANONE		0.5	U		0.5			0.5				U	
4-METHYL-2-PENTANONE		0.5	U		0.5			0.5				5 U	
ACETONE		1	U			U		·	U			U	
BENZENE		0.5	U		0.5			0.5				5 U	
BROMOCHLOROMETHAN	E	0.5	U .		0.5			0.5				5 U	
BROMODICHLOROMETHA	NE	0.5	U		0.5			0.5				5 U	
BROMOFORM		0.25	U		0.25			0.25			0.25		
BROMOMETHANE		0.5	UJ	С		UJ	C		UJ	С		UJ	С
CARBON DISULFIDE		0.5	U		0.5			0.5				5 U	ļ
CARBON TETRACHLORID	E	0.5	U		0.5	<del></del>		0.5				5 U	
CHLOROBENZENE		0.5	U		0.5			0.5				5 U	
CHLORODIBROMOMETHA	ANE	0.25			0.25		<u> </u>	0.25			0.25		<del>                                     </del>
CHLOROETHANE		0.5			0.5			0.5				5 U	
CHLOROFORM		0.5			0.5		ļ <u> </u>	0.5				5 U	
CHLOROMETHANE		0.5			0.5		<u> </u>	0.5				5 U	
CIS-1,2-DICHLOROETHEN	<u></u>	2.8			0.5	1		0.5	1	ļ		5 U	<u> </u>
CIS-1,3-DICHLOROPROPE	ENE	0.1	1		0.1			0.1				1 U	
CYCLOHEXANE		0.5	U		0.5	U_		0.5	U		0.:	5 U	1

3 of 14 3/28/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MV	/304I1-0	1182012	BPS1-TTMW-3	30412-0	1182012	BPS1-TT-MW	304S-0	1182012	BPS1-TT-MW	305D-0	1172012
SDG: 50063-12	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
FRACTION: OV	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM	-		NM			NM		
MEDIA. WATER	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETH/	ANE	1.	7		0.26	J	P	0.5	U		0.5		
1,1,2,2-TETRACHLORO	DETHANE	0.	5 U		0.5	U		0.5	U			U	
1,1,2-TRICHLOROETH	ANE	0.	5 U		0.5	J		0.5				U	
1,1,2-TRICHLOROTRIF	LUOROETHANE	0.	5 U		0.5			0.5			0.33		Р
1,1-DICHLOROETHANE		1.	6		0.5	U		0.5			0.57	+	P
1,1-DICHLOROETHENE		0.	5 U		0.5			0.5			0.73		P
1,2,3-TRICHLOROBEN	ZENE	0.	5 U		0.5			0.5				U	-
1,2,4-TRICHLOROBEN		0.	5 U		0.5			0.5				U	
1,2-DIBROMO-3-CHLO	ROPROPANE		5 U		0.5			0.5				U	
1,2-DIBROMOETHANE		0.2	5 U		0.25			0.25	_		0.25		
1,2-DICHLOROBENZE	NE	0.	5 U		0.5			0.5				U	
1,2-DICHLOROETHAN	=	0.	5 U		0.5			0.5				U	<u> </u>
1,2-DICHLOROPROPA	NE	0.	5 U		0.5			0.5				U	
1,3-DICHLOROBENZEI	NE	0.2	5 U		0.25			0.25		ļ	0.25		
1,4-DICHLOROBENZE	NE		5 U		0.5			0.5				U	
1,4-DIOXANE		2	5 UR	C		UR	С		UR	С		UR	С
2-BUTANONE			5 U		0.5			0.5				U	
2-HEXANONE			5 U		0.5				U			5 U	
4-METHYL-2-PENTANO	ONE		5 U		0.5			0.5		<del> </del>		5 U	<del> </del>
ACETONE			1 U			U			U			U	
BENZENE			5 U		0.5				U	<u> </u>		5 U	<del></del>
BROMOCHLOROMETH	HANE	1	5 U		0.5				U			5 U	<del></del>
BROMODICHLOROME	THANE		5 U		0.5				U				<del>-</del>
BROMOFORM			5 U		0.25			0.25		-	0.2	5 UJ	c
BROMOMETHANE			5 UJ	С		UJ	c		UJ	c			<u> </u>
CARBON DISULFIDE			5 ป		0.5				U _			5 U	
CARBON TETRACHLO	RIDE		5 U		0.5				U			5 U	
CHLOROBENZENE			5 U		0.5				U _				
CHLORODIBROMOME	THANE		5 U		0.25			0.25			0.2	5 U	<del> </del> -
CHLOROETHANE			5 U		0.5				U i U		0.1		P
CHLOROFORM			5 U		0.5			1		<del> </del>		5 U	<u> </u>
CHLOROMETHANE			5 U		0.5		<del> </del>		i U			5 U	-
CIS-1,2-DICHLOROET			6		2.7				i U			1 U	
CIS-1,3-DICHLOROPR	OPENE		1 U		0.1		<del> </del>		U			5 U	
CYCLOHEXANE		0	5 U		0.5	U		0.8	5 U		0.		

3/28/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	/305I-01	172012	BPS1-TT-M	W305I-01	172012RE1	BPS1-TT-MW	305S-0	1172012	BPS1-TT-MW	307D-0	182012
SDG: 50063-12	LAB_ID	1201218-08			1201218-08	RE1		1201218-06			1201244-04		
FRACTION: OV	SAMP_DATE	1/17/2012			1/17/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
MEDIKI WATER	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0	_		0.0			0.0	_		0.0		
	DUP_OF				-								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHAN	 IE	0.28	3 J	Р				0.5	U		0.5	U	
1,1,2,2-TETRACHLOROE		0.5	5 U					0.5	U		0.5	U	
1,1,2-TRICHLOROETHAN		0.5	5 U					0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLU		1.1	1					0.5	U		0.5	U	
1,1-DICHLOROETHANE		2.7	7					0.5	U		0.5	U	
1,1-DICHLOROETHENE		1.3	3					0.5			0.5		
1,2,3-TRICHLOROBENZE	NE	0.9	5 U					0.5			0.5		
1,2,4-TRICHLOROBENZE	NE	0.9	5 U					0.5			0.5		
1,2-DIBROMO-3-CHLORO		0.5	5 U					0.5	Ü		0.5		
1,2-DIBROMOETHANE		0.2	5 U					0.25	U		0.25		
1,2-DICHLOROBENZENE		0.9	5 U					0.5	U		0.5		
1,2-DICHLOROETHANE		0.9	5 U					0.5	บ		0.5	U	
1,2-DICHLOROPROPANE		0.9	5 U						υ		0.5	U	
1,3-DICHLOROBENZENE		0.29	5 U					0.25			0.25		
1,4-DICHLOROBENZENE		0.9	5 U						ijυ		0.5		
1,4-DIOXANE		25	5 UR	С					UR	C	25	UR	С
2-BUTANONE		0.9	5 Ü						υ		0.5	U	
2-HEXANONE		0.	5 U						i U		0.5		
4-METHYL-2-PENTANON	IE	0.	5 U						U		0.5	+	
ACETONE			1 U						U			U	
BENZENE		0.	5 U						i U		0.5		
BROMOCHLOROMETHA	NE	0.9	5 U						i U		0.5	<del></del>	
BROMODICHLOROMETH	HANE	0.	5 U						i U		0.5	<del></del>	
BROMOFORM		0.2	5 U					0.25			0.25		
BROMOMETHANE		0.9	5 UJ	С					UJ	С		UJ	С
CARBON DISULFIDE		0.	5 Ü						5 U		0.5		
CARBON TETRACHLORI	IDE	0.4	9 J	Р					i U		0.5		
CHLOROBENZENE		0.	5 U						บ		0.5		
CHLORODIBROMOMETH	HANE		5 U					0.25			0.25		
CHLOROETHANE			5 U						5 U			U	
CHLOROFORM		0.2	7 J	Р					U			U	
CHLOROMETHANE			5 U						5 U			U	<del></del>
CIS-1,2-DICHLOROETHE	NE	4.	7						5 U			U	
CIS-1,3-DICHLOROPROP	PENE	0.	1 U						U			U	
CYCLOHEXANE		0.	5 U					0.9	5 U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	3071-01	182012	BPS1-TT-MW	307S-0	1182012	BPS1-TT-MW308D-0	1162012	BPS1-TT-MV	V3081-01	162012
SDG: 50063-12	LAB_ID	1201244-07			1201244-09			1201218-02		1201218-03		
FRACTION: OV	SAMP_DATE	1/18/2012			1/18/2012			1/16/2012		1/16/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		NM		
	UNITS	UG/L			UG/L			UG/L		UG/L		
	PCT_SOLIDS	0.0		-	0.0			0.0		0.0		
	DUP_OF			•								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHA	NE	0.5	U		0.5	Ü		0.5 U		0.	5 U	
1,1,2,2-TETRACHLORO	ETHANE	0.5	U		0.5	U		0.5 U		0.	5 U	
1,1,2-TRICHLOROETHA	NE	0.5	U		0.5	U		0.5 U			5 U	
1,1,2-TRICHLOROTRIFL	UOROETHANE	0.5	U		0.5	บ		0.5 U		0.:	5 U	
1,1-DICHLOROETHANE		0.23	J	Р	0.24	J	Р	0.5 U		0.	5 U	
1,1-DICHLOROETHENE		0.5	U		0.5			0.5 U		0.	5 U	
1,2,3-TRICHLOROBENZ	ENE	0.5	U		0.5	U		0.5 U		0.	5 U	
1,2,4-TRICHLOROBENZ	ZENE	0.5	U		0.5	U		0.5 U		0.	5 U	
1,2-DIBROMO-3-CHLOF	ROPROPANE	0.5	U		0.5			0.5 U		0.	5 U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25 U		0.2	5 U	
1,2-DICHLOROBENZEN	E	0.5	U		0.5	U		0.5 U		0.	5 U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5 U		0.	5 U	
1,2-DICHLOROPROPAN	1E	0.5	U		0.5	U		0.5 U		0.	5 U	
1,3-DICHLOROBENZEN	ΙĒ	0.25	U		0.25	U		0.25 U		0.2	5 U	
1,4-DICHLOROBENZEN	IE	0.5	U		0.5	U		0.5 U		0.	5 U	
1,4-DIOXANE		25	UR	С	25	UR	С	25 UR	С	2	5 UR	С
2-BUTANONE		0.5	U		0.5	U		0.5 U		0.	5 U	
2-HEXANONE		0.5	U		0.5	U		0.5 U		0.	5 U	
4-METHYL-2-PENTANO	NE	0.5	U		0.5	U		0.5 U		0.	5 U	
ACETONE		1	U		1	U		1 U			1 U	
BENZENE		0.5	U		0.5	U		0.5 U		0.	5 U	
BROMOCHLOROMETH	ANE	0.5	U		0.5	U		0.5 U		0.	5 U	
BROMODICHLOROMET	THANE	0.5	U		0.5	U		0.5 U		0.	5 U	
BROMOFORM		0.25	U		0.25	U		0.25 U		0.2	5 U	
BROMOMETHANE		0.5	UJ	С	0.5	UJ	С	0.5 UJ	С	0.	5 UJ	С
CARBON DISULFIDE		0.2	J	Р	0.5	U		0.5 U		0.	5 U	
CARBON TETRACHLOR	RIDE	0.5	U		0.5	U		0.5 U		0.	5 U	
CHLOROBENZENE		0.5	U		0.5	U		0.5 U		0.	5 U	
CHLORODIBROMOMET	THANE	0.25	U		0.25	U		0.25 U		0.2	5 U	
CHLOROETHANE		0.5	U		0.5	U		0.5 U		0.	5 U	
CHLOROFORM		0.5	U		0.5	U		0.19 J	P	0.	5 U	
CHLOROMETHANE		0.5	U		0.5	U		0.5 U		0.	5 υ	
CIS-1,2-DICHLOROETH	ENE	0.5	U		0.5	U		0.5 U		0.	5 U	
CIS-1,3-DICHLOROPRO		0.1			0.1	U		0.1 U		0.	1 U	
CYCLOHEXANE		0.5		-	0.5	U		0.5 U		0.	5 U	

6 of 14 3/28/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MV	V308S-0	1162012	BPS1-TT-MW	309D-0	1112012	BPS1-TT-MW	3091-0	1112012	BPS1-TT-MW	309S-0	1102012
SDG: 50063-12	LAB_ID	1201218-04			1201126-03			1201126-02			1201112-02		
FRACTION: OV	SAMP_DATE	1/16/2012			1/11/2012		_	1/11/2012			1/10/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0	•		0.0			0.0		
	DUP_OF						-						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHAN	1E	0.	5 U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROE	THANE	0.	5 U		0.5	U		0.5			0.5	U	
1,1,2-TRICHLOROETHAN	<b>₹</b>	0.	5 <b>U</b>		0.5	U		0.5	U			U	
1,1,2-TRICHLOROTRIFLU	JOROETHANE	0.9	5 U		0.45	J	Р	0.5			0.5	U	
1,1-DICHLOROETHANE		0.9	5 <b>U</b>		0.27		Р	0.5	L		0.5	U	
1,1-DICHLOROETHENE			5 U		0.5			0.5				U	
1,2,3-TRICHLOROBENZE	NE	0.9	5 U		0.5			0.5	U		0.5		
1,2,4-TRICHLOROBENZE	NE	0.9	5 U	•	0.5	U		0.5	U		0.5		
1,2-DIBROMO-3-CHLORO	PROPANE	0.9	5 U		0.5			0.5			0.5	_	
1,2-DIBROMOETHANE		0.29	5 U		0.25			0.25	1		0.25		
1,2-DICHLOROBENZENE		0.9	5 U		0.5			0.5	1		0.5	U	
1,2-DICHLOROETHANE		0.9	5 U		0.5			0.5				U	
1,2-DICHLOROPROPANE	<u> </u>	0.9	5 U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.2	5 U		0.25	U		0.25	1		0.25		
1,4-DICHLOROBENZENE		0.9	U		0.5			0.5				U	
1,4-DIOXANE		2	UR	С	25	UR	С	25	UR	С		UR	С
2-BUTANONE		0.5	5 U		0.5			0.5	บ		0.5	U	
2-HEXANONE		0.	5 U		0.5	1		0.5	U			U	
4-METHYL-2-PENTANON	E	0.8	5 U		0.5			0.5				U	
ACETONE		•	ιU			U		1	U			U	_
BENZENE		0.9	5 U		0.5			0.5	U			U	
BROMOCHLOROMETHA	NE	0.9	5 U		0.5			0.5			0.5		
BROMODICHLOROMETH	HANE	0.8	5 U		0.5			0.5				U	
BROMOFORM		0.2	5 U		0.25			0.25			0.25	i	
BROMOMETHANE			5 UJ	С	0.5			0.5	<del> </del>	_		U	
CARBON DISULFIDE		0.5	5 U		0.5			0.5	U			U	
CARBON TETRACHLORI	DE	J	5 U		0.5	U		0.5	U			U	
CHLOROBENZENE		0.5	5 U		0.5	U		0.5	U			υ	
CHLORODIBROMOMETH	IANE	0.2			0.25	_		0.25			0.25		
CHLOROETHANE			5 U		0.5			0.5	<del></del>			U	
CHLOROFORM			5 U		0.5			0.5				U	
CHLOROMETHANE		0.9	5 U		0.5			0.5				U	
CIS-1,2-DICHLOROETHE	NE		5 U		0.5			0.5				U	
CIS-1,3-DICHLOROPROF	PENE		l U		0.1			0.1	ļ.,			U	
CYCLOHEXANE		0.9	5 <b>U</b>		0.5	U		0.5	U		0.5	U	

7 of 14 3/28/2012

PROJ_NO: 02230	NSAMPLE	BPS1-Dup01-0	0117201	2	BPS1-FB01-0	118201	2	BPS1-FW-MW	/02-011	172012	BPS1-RB01-0	118201	2
SDG: 50063-12	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
FRACTION: OV	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM	•		NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW	305S-01	172012									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROME	THANE	0.5	U		0.5	UJ	С	0.5		С		UJ	С
ETHYLBENZENE		0.25	U		0.25			0.25			0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5			0.5			0.5		
M+P-XYLENES		0.5	U		0.5			0.5			0.5	U	
METHYL ACETATE	-	0.5	U		0.56	U	Α	0.5			0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ET	HER	0.5	Ü	<u></u>	0.5	U		0.35		Р	0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5			0.5		
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	_	
STYRENE		0.1	U		0.1	U		0.1	U		0.1		
TETRACHLOROETHENE		0.5	υ		0.5	U		21			0.5		
TOLUENE		0.1	U		0.1	<del></del>		0.1			0.1	_	
TRANS-1,2-DICHLOROET	HENE	0.5	U		0.5	U		0.5			0.5		
TRANS-1,3-DICHLOROPE	ROPENE	0.25	U		0.25	U		0.25	U		0.25		
TRICHLOROETHENE		0.5	U	ļ	7			2.7			6.4		
TRICHLOROFLUOROMET	THANE	0.5	U		0.5			0.5			0.5	_	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TB01-01	1162012	2	BPS1-TB-011	02012		BPS1-TB-011	12012		BPS1-TB02-0	118201	2
SDG: 50063-12	LAB_ID	1201218-01			1201112-01			1201126-01			1201244-01		
FRACTION: OV	SAMP_DATE	1/16/2012			1/10/2012	-		1/11/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	-										,	
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROM	IETHANE	0.5	U		0.5	U		0.5	U			UJ	С
ETHYLBENZENE		0.25	U		0.25			0.25			0.25		
ISOPROPYLBENZENE		0.5	U			U		0.5			0.5		
M+P-XYLENES		0.5	U			U	<u> </u>	0.5			0.5	-	<del></del>
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5		Α
METHYL CYCLOHEXAN	E	0.5	U			U		0.5			0.5		
METHYL TERT-BUTYL B	THER	0.5	U		0.5	U		0.5			0.5		
METHYLENE CHLORIDI	<u> </u>	0.5	U			U		0.5	U		0.5		
O-XYLENE		0.25	U		0.25	ijυ		0.25	U		0.25		
STYRENE		0.1	U		0.1	υ <u> </u>		0.1				U	
TETRACHLOROETHEN	 E	0.5	U		0.5	U		0.5				U	
TOLUENE		0.1	U		0.1	U		0.1	_			U	
TRANS-1,2-DICHLOROE	THENE	0.5	U		0.5	Ū		0.5				U	
TRANS-1,3-DICHLOROF	PROPENE	0.25	U		0.25	i U		0.25	-		0.25		
TRICHLOROETHENE		0.5	U			U		0.5				U	
TRICHLOROFLUOROMI	ETHANE	0.5	Ū		0.5	U		0.5				U	
VINYL CHLORIDE		0.5	U	T	0.5	5 U		0.5	U		0.5	5 U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-Dup	02-0118	32012	BPS1-TT-MW	301D-0	1172012	BPS1-TT-MW	301I-01	172012	BPS1-TT-MW	7/2012 // G/L ) :SULT   VQL   QLCD			
SDG: 50063-12	LAB_ID	1201244-10			1201218-05			1201218-09			1201218-07				
FRACTION: OV	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012 NM				
MEDIA: WATER	QC_TYPE	NM			NM			NM							
	UNITS	UG/L			UG/L 0.0			UG/L			UG/L				
	PCT_SOLIDS	0.0						0.0	0.0			0.0			
	DUP_OF	BPS1-TTMW	-30412-0	1182012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT		QLCD		
DICHLORODIFLUOROME	THANE	0.5	5 U		0.5	U		0.5	UJ	С	0.5 U				
ETHYLBENZENE		0.25	U		0.25			0.25			0.25				
ISOPROPYLBENZENE		0.5	5 U		0.5			0.5			0.5				
M+P-XYLENES		0.5	i U	·	0.5			0.5	+		0.5				
METHYL ACETATE		0.5	5 U		0.5	U		0.5	+		0.5				
METHYL CYCLOHEXANE			i U		0.5	<u> </u>		0.5			0.5	<b>-</b>			
METHYL TERT-BUTYL E	THER		i U		0.5			0.5	<del> </del>		0.5	<del></del>			
METHYLENE CHLORIDE		0.5	i U			U		0.5			0.5		_		
O-XYLENE		0.25	5 U		0.25			0.25			0.25				
STYRENE		0.1	U		0.1	U		0.1			0.1				
TETRACHLOROETHENE		5.5	5		0.26	J	P	0.5			0.5				
TOLUENE			U		0.14		Р	0.1			0.1	<del></del>			
TRANS-1,2-DICHLOROE	THENE		U			U		0.5			0.5				
TRANS-1,3-DICHLOROPI	ROPENE	0.25	5 U		0.25			0.25			0.25		1		
TRICHLOROETHENE		1.8			2.6			0.5			0.5				
TRICHLOROFLUOROME	THANE	0.5	5 U			U		0.5			0.5				
VINYL CHLORIDE		0.5	5 U		0.5	U		0.5	U		0.5	U			

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	30411-0	1182012	BPS1-TTMW	30412-0	1182012	BPS1-TT-MW:	304S-0	1182012	BPS1-TT-MW				
SDG: 50063-12	LAB_ID	1201244-06			1201244-08			1201244-05		•	1201218-10				
FRACTION: OV	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012				
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM UG/L				
	UNITS	UG/L			UG/L		-	UG/L							
	PCT_SOLIDS	0.0			0.0 0.0			0.0	0.0			0.0			
	DUP_OF														
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD		
DICHLORODIFLUOROME	THANE	0.5	U		0.5	U		0.5	UJ	С	0.5	U			
ETHYLBENZENE		0.25	U		0.25	U		0.25			0.25	Ü			
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5			0.5	U			
M+P-XYLENES		0.5	U		0.5	U		0.5			0.5	U			
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U			
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5			0.5				
METHYL TERT-BUTYL ET	HER	0.5	U		0.5	U		0.5			0.5				
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5			0.5	U			
O-XYLENÉ		0.25	U		0.25	U		0.25	U		0.25	U			
STYRENE		0.1	U		0.1	υ		0.1	U		0.1	U			
TETRACHLOROETHENE		25			5.5	j		0.5			1.9				
TOLUENE		0.1	U		0.1	U		0.1			0.1				
TRANS-1,2-DICHLOROET	HENE	0.5	U			U		0.5			0.5				
TRANS-1,3-DICHLOROPR	OPENE	0.25	U		0.25	U		0.25			0.25	<del></del>			
TRICHLOROETHENE		4.1			1.7	<u>'</u>		0.5			140				
TRICHLOROFLUOROMET	HANE	0.5	U		0.5	U		0.5	U		0.94		Р		
VINYL CHLORIDE		0.5	U		0.5	บ		0.5	U		0.5	U			

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	305I-01	172012	BPS1-TT-MW	305I-01	172012RE1	BPS1-TT-MW	305S-0	1172012	BPS1-TT-MW	BPS1-TT-MW307D-01182012		
SDG: 50063-12	LAB_ID	1201218-08			1201218-08R	Ξ1		1201218-06			1201244-04	_	<u></u>	
FRACTION: OV	SAMP_DATE	1/17/2012		<del>_</del> ·	1/17/2012			1/17/2012			1/18/2012			
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM			
	UNITS	UG/L			UG/L UG/L						UG/L			
	PCT_SOLIDS	0.0			0.0			0.0			0.0			
	DUP_OF												,	
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD		VQL	QLCD	
DICHLORODIFLUOROME	THANE	0.5	U					0.5			0.5		С	
ETHYLBENZENE		0.25	U			<u> </u>		0.25			0.25			
ISOPROPYLBENZENE		0.5	U					0.5			0.5			
M+P-XYLENES		0.5	U					0.5			0.5			
METHYL ACETATE		0.5	U					0.5	-		0.5			
METHYL CYCLOHEXANE		0.5						0.5	-		0.5			
METHYL TERT-BUTYL ET	HER	0.5	U					0.5	<b>├</b>		0.5			
METHYLENE CHLORIDE		0.5	U					0.5			0.5		1	
O-XYLENE		0.25	U					0.25			0.25			
STYRENE		0.1	U					0.1			0.1			
TETRACHLOROETHENE		3.3						0.5			0.5			
TOLUENE		0.1	U					0.1			0.1			
TRANS-1,2-DICHLOROET	HENE	0.5	U					0.5			0.5		<u> </u>	
TRANS-1,3-DICHLOROPF	ROPENE	0.25	U					0.25			0.25			
TRICHLOROETHENE					3900			0.5	-		0.5			
TRICHLOROFLUOROME	THANE	0.91	J	Р				0.5			0.5			
VINYL CHLORIDE		0.5	U			<u> </u>		0.5	U		0.5	U		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	307I-01	182012	BPS1-TT-MW	307S-0	1182012	BPS1-TT-M	W308D-0	1162012	BPS1-TT-MV	BPS1-TT-MW308I-01162012			
SDG: 50063-12	LAB_ID	1201244-07			1201244-09			1201218-02			1201218-03				
FRACTION: OV	SAMP_DATE	1/18/2012			1/18/2012			1/16/2012			1/16/2012				
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM				
	UNITS	UG/L			UG/L	UG/L					UG/L 0.0				
	PCT_SOLIDS	0.0			0.0			0.0							
	DUP_OF														
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD		
DICHLORODIFLUOROI	METHANE	0.5	U		0.5	UJ	С	0	.5 U		0.5 U				
ETHYLBENZENE		0.25	U		0.25	U		0.2	25 U		0.2	5 U			
ISOPROPYLBENZENE		0.5	U		0.5	U		0	.5 U		0.	5 U			
M+P-XYLENES		0.5	U		0.5	U		0	.5 U		0.	5 U			
METHYL ACETATE		0.5	U		0.5	U	Α	0	.5 U		0.	5∤U			
METHYL CYCLOHEXA	NE	0.5	U		0.5	U			.5 U		0.	5 U			
METHYL TERT-BUTYL	ETHER	0.5	U		0.5	U		0	.5 U		0.	5∤U			
METHYLENE CHLORIC	DE	0.5			0.5	ļ			.5 U			5 U			
O-XYLENE		0.25	U		0.25	U		0.2	25 U		0.2	5 U			
STYRENE		0.1	U		0.1	U		. 0	.1 U			1 U			
TETRACHLOROETHEN	1E	1.1			1.3		·	0	.7 J	P		5 U			
TOLUENE		0.1			0.1	_			.1 U			1 U			
TRANS-1,2-DICHLORO	ETHENE	0.5	U		0.5				.5 U		· · · · · · · · · · · · · · · · · · ·	5 U			
TRANS-1,3-DICHLORO	PROPENE	0.25	U		0.25	U		<del></del>	25 U			5 U			
TRICHLOROETHENE		1.8			0.57	J	Р		.6			5 U			
TRICHLOROFLUOROM	IETHANE	0.5			0.5	U	1		.5 U			5 U			
VINYL CHLORIDE		0.5	U		0.5	U		0	.5 U		0.	5 ป			

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	308S-01	1162012	BPS1-TT-MW	309D-0	1112012	BPS1-TT-MW	3091-01	112012	BPS1-TT-MW:	309S-0	102012	
SDG: 50063-12	LAB_ID	1201218-04			1201126-03			1201126-02			1201112-02			
FRACTION: OV	SAMP_DATE	1/16/2012			1/11/2012			1/11/2012			1/10/2012			
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM			
	UNITS	UG/L			UG/L			UG/L 0.0			UG/L			
	PCT_SOLIDS	0.0			0.0						0.0			
	DUP_OF													
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DICHLORODIFLUOROME	THANE	0.5	U		0.5	U		0.5	U		0.5	U		
ETHYLBENZENE		0.25	U		0.25	U		0.25	د		0.25	U		
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	5		0.5	U		
M+P-XYLENES		0.5	U		0.5	U		0.5	<b>5</b>		0.5	U		
METHYL ACETATE		0.5	U		0.5	U		0.5	ט		0.5	U		
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	ت		0.5	U		
METHYL TERT-BUTYL ET	HER	0.5	U		0.5	U		0.5	ט י		0.5	ט		
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	ت		0.5	כ		
O-XYLENE		0.25	U		0.25	U		0.25	ט		0.25	U		
STYRENE		0.1	U		0.1	U		0.1	כ		0.1	ح		
TETRACHLOROETHENE		0.5	U		1.1			0.5	ت		0.5	د		
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U		
TRANS-1,2-DICHLOROET	HENE	0.5	U		0.5	U		0.5	U		0.5	U		
TRANS-1,3-DICHLOROPR	OPENE	0.25	U		0.25	U		0.25			0.25	U		
TRICHLOROETHENE		0.71	J	Р	1.8			0.5	U		0.61	J	Р	
TRICHLOROFLUOROMET	HANE	0.5	U		0.5	U		0.5	υ		0.5	U		
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U		

PROJ_NO: 02230	NSAMPLE	BPS1-Dup01-0	0117201	2	BPS1-FB01-01	182012	!	BPS1-FW-MW	/02-011	72012	BPS1-RB01-0	1182012	!	
SDG: 50063-12	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03			
FRACTION: PCB	SAMP_DATE	1/17/2012			1/18/2012 1/17/2012				1/18/2012					
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM			
	UNITS	UG/L		UG/L UG/L				JG/L			UG/L			
PCT_SOLIDS		0.0			0.0 0.0			0.0	0.0			0.0		
	DUP_OF	BPS1-TT-MW	305S-01	172012										
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U		
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	υ		
AROCLOR-1232		0.08	U		0.08	U		0.08	Ų		0.08	υ		
AROCLOR-1242		0.08	U		0.08	U		0.08	U		0.08	U		
AROCLOR-1248		0.08	U		0.08	U		0.3			0.08	U		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U		
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U		
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U		
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U		

3/29/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-Dupt	02-0118	2012	BPS1-TT-MW	301D-0	1172012	BPS1-TT-MW	3011-01	172012	BPS1-TT-MW	BPS1-TT-MW301S-011720	
SDG: 50063-12	LAB_ID	1201244-10	•		1201218-05			1201218-09			1201218-07		
FRACTION: PCB	SAMP_DATE	1/18/2012			1/17/2012 1/17/201			1/17/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM		-	NM			NM			NM		
	UNITS	UG/L	•		UG/L			UG/L			UG/L		
PCT_SOLIDS		0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TTMW-	30412-01	182012									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	J		0.08	U	
AROCLOR-1242		0.08	U		0.75	J	U	0.79			0.08	U	
AROCLOR-1248		1.6			0.08	U		0.08	U		10		
AROCLOR-1254		0.08	U		0.08	ป		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U	<u> </u>	0.08	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	30411-0	1182012	BPS1-TTMW-	30412-0°	1182012	BPS1-TT-MW	304S-0	1182012	BPS1-TT-MW305D-01172012			
SDG: 50063-12	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10			
FRACTION: PCB	SAMP_DATE	1/18/2012			1/18/2012 1/18/2012						1/17/2012			
MEDIA: WATER	QC_TYPE	NM		·	NM			NM			NM			
	UNITS	UG/L			UG/L		UG/L			UG/L				
	PCT_SOLIDS	0.0	0.0			0.0					0.0			
	DUP_OF													
PARAMETER	-	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.0	8 U		
AROCLOR-1221		0.08	U		0.08	Ü		0.08	U		0.0	8 U		
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.0	8 U		
AROCLOR-1242		0.08	U		0.08	U		0.08	U		0.1	6 J	PU	
AROCLOR-1248		0.97			1.5			0.08	U		0.0	в		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.0	8 U		
AROCLOR-1260		0.08	U		0.08	Ū		0.08	U		0.0	8 U		
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.0	8 U		
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.0	8 U		

3 of 6 3/29/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	305I-01	172012	BPS1-TT-MW	305\$-0	1172012	BPS1-TT-MW	307D-0	1182012	BPS1-TT-MW	307I-01	182012
SDG: 50063-12	LAB_ID	1201218-08			1201218-06			1201244-04			1201244-07		
FRACTION: PCB	SAMP_DATE	1/17/2012			1/17/2012	,		1/18/2012			1/18/2012	_	
MEDIA: WATER	QC_TYPE	NM	-	••	NM			NM			NM		
	UNITS	UG/L	<del></del>		UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0	-		0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.08	U		0.56			0.08	U	
AROCLOR-1248		1.3			0.08	U		0.08	U		0.84		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262	· · ·	0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

4 of 6 3/29/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	307S-01	182012	BPS1-TT-MW	308D-01	162012	BPS1-TT-MW	308I-011	62012	BPS1-TT-MW	308S-01	162012
SDG: 50063-12	LAB_ID	1201244-09			1201218-02			1201218-03			1201218-04		
FRACTION: PCB	SAMP_DATE	1/18/2012			1/16/2012			1/16/2012			1/16/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.073	J	Р	0.52			0.08	U	
AROCLOR-1248		0.08	U		0.08	U		0.08	U		0.2		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	Ū		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW:	309D-01	1112012	BPS1-TT-MW	3091-01	112012	BPS1-TT-MW	309S-0	1102012		
SDG: 50063-12	LAB_ID	1201126-03			1201126-02			1201112-02	1201112-02 1/10/2012 NM JG/L			
FRACTION: PCB	SAMP_DATE	1/11/2012			1/11/2012			1/10/2012				
MEDIA: WATER	QC_TYPE	NM		_	NM			NM				
	UNITS	UG/L			UG/L			UG/L				
	PCT_SOLIDS	0.0			0.0			0.0	-			
	DUP_OF											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD		
AROCLOR-1016		0.085	U		0.08	U		0.086	U			
AROCLOR-1221		0.085	U		0.08	U		0.086	U	:		
AROCLOR-1232		0.085	U		0.08	U		0.086	U			
AROCLOR-1242		0.085	U		0.43			0.086	U			
AROCLOR-1248		0.085	U		0.08	U		1				
AROCLOR-1254		0.085	U		0.08	U		0.086	U			
AROCLOR-1260		0.085	U		0.08	U		0.086	U			
AROCLOR-1262		0.085	U		0.08	U		0.086	U			
AROCLOR-1268		0.085	Ü		0.08	U		0.086	υ			



## **Tetra Tech**

## INTERNAL CORRESPONDENCE

TO:

R. SOK

DATE:

March 28, 2012

FROM:

**MEGAN CARSON** 

COPIES:

**DV FILE** 

SUBJECT:

INORGANIC DATA VALIDATION- TOTAL AND FILTERED IRON AND CHROMIUM.

AND HEXAVALENT CHROMIUM NWIRP BETHPAGE, CTO WE44

SDG 50063-12

**SAMPLES:** 

23/Water/

BPS1-Dup01-01172012
BPS1-FW-MW02-01172012
BPS1-TT-Dup02-01182012
BPS1-TT-MW301I-01172012
BPS1-TT-MW304I1-01182012
BPS1-TT-MW304S-01182012
BPS1-TT-MW305I-01172012
BPS1-TT-MW307D-01182012
BPS1-TT-MW307S-01182012
BPS1-TT-MW308I-01162012
BPS1-TT-MW309D-01112012

BPS1-FB01-01182012

BPS1-RB01-01182012 BPS1-TT-MW301D-01172012 BPS1-TT-MW301S-01172012 BPS1-TT-MW305D-01172012 BPS1-TT-MW305S-01172012 BPS1-TT-MW305S-01172012 BPS1-TT-MW307I-01182012 BPS1-TT-MW308D-01162012 BPS1-TT-MW308S-01162012 BPS1-TT-MW309I-01112012

BPS1-TT-MW309S-01102012

### Overview

The sample set for NWIRP Bethpage, SDG 50063-12, consists of twenty one (21) aqueous samples, one field blank, and one rinsate blank. This SDG contained two field duplicate pairs: BPS1-Dup01-01172012/BPS1-TT-MW305S-01172012 and BPS1-TT-Dup02-01182012/BPS1-TT-MW304I2-01182012.

All samples were analyzed for total chromium and iron. Samples BPS1-FB01-01182012, BPS1-RB01-01182012, BPS1-TT-MW309D-01112012-F, and BPS1-TT-MW309S-01102012-F were analyzed for filtered chromium and iron. Samples BPS1-FB01-01182012, BPS1-RB01-01182012, BPS1-TT-Dup02-01182012, BPS1-TT-MW301I-01172012, BPS1-TT-MW304I1-01182012, BPS1-TT-MW309D-01172012, BPS1-TT-MW309D-01112012, BPS1-TT-MW309D-01112012, BPS1-TT-MW309I-01112012, and BPS1-TT-MW309S-01102012 were analyzed for hexavalent chromium. The samples were collected by Tetra Tech on January 10th, 11th, 16th, 17th, and 18th, 2012 and analyzed by Trimatrix Laboratories. Metals analyses were performed using SW-846 Methods 6010C and 6020A. Hexavalent chromium analysis was performed using SW-846 Method 7196.

These data were evaluated based on the following parameters:

- * Data Completeness
- Holding Times
  - Initial and Continuing Calibration Verification Results
- Laboratory Method / Preparation Blank Analyses
- ICP Interference Results
- Matrix Spike / Matrix Spike Duplicate Recoveries
- Field Duplicate Precision

To: R. Sok Page 2 of 3 3/28/2012

- Laboratory Duplicate Results
- Laboratory Control Standard Results
- ICP Serial Dilution Results
- Detection Limits
- Analyte Quantitation

#### Metals:

All sample results were within quality control limits.

#### **Hexavalent Chromium:**

The CRDL standard analyzed on 1/11/12 had a percent recovery > 150% for hexavalent chromium. Sample BPS1-TT-MW309S-01102012 was affected. The positive result was qualified as estimated (J).

#### **Notes**

Positive results greater than the detection limit (DL) but less than the limit of quantitation (LOQ) were qualified as estimated (J).

Sample ID BPS1-TT-MW304I2-01182012 was incorrectly labeled on the Form 1s and the EDD. The ID was changed to match the chain of custody.

The following contaminants were detected in calibration blanks at the following maximum concentrations:

	<u>iviaximum</u>	ACTION
<u>Analyte</u>	<u>Concentration</u>	<u>Level</u>
Hexavalent chromium (1)	0.0005 mg/L	2.5 ug/L
Hexavalent chromium ⁽²⁾	0.0036 mg/L	18 ug/L

- (1) Maximum concentration found in a calibration blank affecting samples analyzed on 1/11/12.
- (2) Maximum concentration found in a calibration blank affecting samples analyzed on 1/12/12.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No validation action was warranted as sample results were either > action level or non-detected.

The total chromium concentration in sample BPS1-TT-Dup02-01182012 was slightly less than the hexavalent chromium concentration. No action was taken.

#### Executive Summary

**Laboratory Performance:** CRDL standard non-compliances resulted in the qualification of sample results. Hexavalent chromium blank contamination did not impact sample results.

#### Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the U.S. EPA Region II "Validation of metals for the Contract Laboratory Program based on SOW ILMO5.3 (SOP Revision 13)", September 2006 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

To: R. Sok Page 3 of 3 3/28/2012

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Vech

Megan Carson

Chemist/Data Validator

Tetra Tech

Joseph A. Samchuck

Quality Assurance Officer

#### Attachments:

- 1.
- Appendix A Qualified Analytical Results Appendix B Results as reported by the Laboratory 2.
- Appendix C Region II Worksheets 3.
- 4. Appendix D - Support Documentation

# APPENDIX A QUALIFIED ANALYTICAL RESULTS

#### **Qualifier Codes:**

A = Lab Blank Contamination

B = Field Blank Contamination

C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)

C01 = GC/MS Tuning Noncompliance

D = MS/MSD Recovery Noncompliance

E = LCS/LCSD Recovery Noncompliance

F = Lab Duplicate Imprecision

G = Field Duplicate Imprecision

H = Holding Time Exceedance

I = ICP Serial Dilution Noncompliance

J = ICP PDS Recovery Noncompliance; MSA's r < 0.995

K = ICP Interference - includes ICS % R Noncompliance

L = Instrument Calibration Range Exceedance

M = Sample Preservation Noncompliance

N = Internal Standard Noncompliance

N01 = Internal Standard Recovery Noncompliance Dioxins

N02 = Recovery Standard Noncompliance Dioxins

N03 = Clean-up Standard Noncompliance Dioxins

O = Poor Instrument Performance (i.e., base-time drifting)

P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)

Other problems (can encompass a number of issues; i.e.chromatography,interferences,

Q = etc.

R = Surrogates Recovery Noncompliance

S = Pesticide/PCB Resolution

T = % Breakdown Noncompliance for DDT and Endrin

U = RPD between columns/detectors >40% for positive results determined via GC/HPLC

V = Non-linear calibrations; correlation coefficient r < 0.995

W = EMPC result

X = Signal to noise response drop

Y = Percent solids <30%

Z = Uncertainty at 2 sigma deviation is less than sample activity

Z1 = Tentatively Identified Compound considered presumptively present

Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPS1-Dup01	-011720	12	BPS1-FB01-	0118201	2	BPS1-FW-MV	V02-011	72012	BPS1-RB01-	0118201	2
SDG: 50063-12	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
FRACTION: M	SAMP_DATE	1/17/2012			1/18/2012	_		1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
UNITS		UG/L			UG/L	-		UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MV	V305S-0	1172012									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		2.	6		0	5 U		8.5			0.	5 U	
IRON		65	0		8	2 J	P	330			2	9	

3/29/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-Dup	02-011	82012	BPS1-TT-	MW30	1D-01	1172012	BPS1-TT-I	vW3	01I-01	172012	BPS1-TT-M	W301S-0	1172012
SDG: 50063-12	LAB_ID	1201244-10			1201218-0	)5			1201218-0	9			1201218-07		
FRACTION: M	SAMP_DATE	1/18/2012		-	1/17/2012				1/17/2012				1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM				NM				NM		
	UNITS	UG/L			UG/L				UG/L				UG/L		
	PCT_SOLIDS	0.0			0.0				0.0				0.0		
	DUP_OF	BPS1-TT-MW	30412-0	1182012											
PARAMETER		RESULT	VQL	QLCD	RESULT	V	'QL	QLCD	RESULT	1	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		170				92				7			2	.5	
IRON		10	J	Р		14 J		Р		17	J	Р		56	

3/29/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	30411-0	1182012	BPS1-TT-MV	V304I2-0	1182012	BPS1-TT-MW	304S-0	1182012	BPS1-TT-MW	/305D-0	1172012
SDG: 50063-12	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
FRACTION: M	SAMP_DATE	1/18/2012	-		1/18/2012			1/18/2012			1/17/2012		_
MEDIA: WATER	QC_TYPE	NM		_	NM			NM			NM		
<u> </u>	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF			<u> </u>					•				
PARAMETER	- '	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		38			20	0		1.4			22	2	
IRON		400			1	6 J	Р	58			1100	<b>o</b> [	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	3051-01	172012	BPS1-TT-MW	/305S-0	1172012	BPS1-TT-MW	/307D-0	1182012	BPS1-TT-MW	307I-01	182012
SDG: 50063-12	LAB_ID	1201218-08			1201218-06	-	-	1201244-04			1201244-07		
FRACTION: M	SAMP_DATE	1/17/2012			1/17/2012			1/18/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM		•	NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF		·									•	
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		3.5			2.4	1		13	S		12		
IRON		1100			560	)		460			460		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	307S-0	1182012	BPS1-TT-MV	V308D-0	1162012	BPS1-TT-MW	3081-01	162012	BPS1-TT-MW	308S-01	162012
SDG: 50063-12	LAB_ID	1201244-09			1201218-02			1201218-03			1201218-04		
FRACTION: M	SAMP_DATE	1/18/2012			1/16/2012			1/16/2012			1/16/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L	-		UG/L	-		UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		4			1	7		10			10		
IRON		530			240	וכ		240			150		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	309D-0	1112012	BPS1-TT-MW	3091-01	112012	BPS1-TT-MW	309S-0	1102012
SDG: 50063-12	LAB_ID	1201126-03			1201126-02			1201112-02		
FRACTION: M	SAMP_DATE	1/11/2012			1/11/2012			1/10/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER	<del>-</del>	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		7.5			49			18		
IRON		2400			130			2100		

PROJ_NO: 02230	NSAMPLE	BPS1-FB01-	0118201	2	BP\$1-RB01-	0118201	12	BPS1-TT-MW	309D-0	1112012-F	BPS1-TT-MW	/309S-0	1102012-F
SDG: 50063-12	LAB_ID	1201244-02			1201244-03			1201126-04			1201112-03		
FRACTION: MF	SAMP_DATE	1/18/2012			1/18/2012			1/11/2012			1/10/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0	•		0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		0.	5 U		0.	5 U		0.56	J	Р	13	3	
IRON		1	0 U		1	0 U		31			92	2	

PROJ_NO: 02230	NSAMPLE	BPS1-FB01	-0118201	2	BPS1-RB01-	0118201	12	BPS1-TT-Dup	02-011	82012	BPS1-TT-M	IW301I-0	1172012
SDG: 50063-12	LAB_ID	1201244-02			1201244-03			1201244-10			1201218-09	)	
FRACTION: MISC	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM		·	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF							BPS1-TT-MW	30412-0	1182012			
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROM	IIUM		1 U		0.4	1 J	Р	182	:			5.3	

PROJ NO: 02230	NSAMPLE	BPS1-TT-MW	30411-0	1182012	BPS1-TT-MV	V304I2-0	1182012	BPS1-TT-MV	V305D-0	1172012	BPS1-TT-M\	W307I-01	182012	
SDG: 50063-12	LAB ID	1201244-06			1201244-08		1201218-10			1201244-07				
FRACTION: MISC	SAMP DATE	1/18/2012			1/18/2012			1/17/2012			1/18/2012			
MEDIA: WATER QC TYP		NM			NM			NM			NM			
	UNITS	UG/L 0.0			UG/L			UG/L			UG/L 0.0			
	PCT_SOLIDS				0.0			0.0						
	DUP_OF													
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
HEXAVALENT CHROMIUM		35.5		- "	18	1			1 U			1 U		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MV	V309D-0	1112012	BPS1-TT-MW	309I-01	112012	BPS1-TT-MW	BPS1-TT-MW309S-01102012			
SDG: 50063-12	LAB_ID	1201126-03		-	1201126-02			1201112-02				
FRACTION: MISC	SAMP_DATE	1/11/2012			1/11/2012			1/10/2012				
MEDIA: WATER	QC_TYPE	NM			NM			NM				
	UNITS	UG/L			UG/L			UG/L				
	PCT_SOLIDS	0.0			0.0			0.0				
	DUP_OF											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD		
HEXAVALENT CHROMIUM			1 U		47.7			8.9	J	С		



## **Tetra Tech INC**

## INTERNAL CORRESPONDENCE

TO:

R. SOK

DATE:

MARCH 28, 2012

FROM:

**JOSEPH KALINYAK** 

COPIES:

DV FILE

SUBJECT:

ORGANIC DATA VALIDATION - VOC, PCB

**NWIRP BETHPAGE, CTO WE44** 

**SAMPLE DELIVERY GROUP SDG 50063-13** 

SAMPLES:

22 / Aqueous / VOC

BPS1-Dup03-01192012	BPS1-Dup04-01232012	BPS1-FB02-01232012
BPS1-FW-MW01-01192012	BPS1-FW-MW03-01192012	BPS1-HN-MW29I-01192012
BPS1-RB02-01232012	BPS1-TB03-01192012	BPS1-TB04-01202012
BPS1-TB05-01232012	BPS1-TT-MW302D-01202012	BPS1-TT-MW302I1-01202012
BPS1-TT-MW302I2-01202012	BPS1-TT-MW302S-01202012	BPS1-TT-MW303D-01192012
BPS1-TT-MW303I1-01192012	BPS1-TT-MW303I2-01192012	BPS1-TT-MW303S-01232012
BPS1-TT-MW304D-01192012	BPS1-TT-MW306D-01232012	BPS1-TT-MW306I-01232012
BPS1-TT-MW306S-01232012		

#### 19 / Aqueous / PCB

BPS1-Dup03-01192012	BPS1-Dup04-01232012	BPS1-FB02-01232012
BPS1-FW-MW01-01192012	BPS1-FW-MW03-01192012	BPS1-HN-MW29I-01192012
BPS1-RB02-01232012	BPS1-TT-MW302D-01202012	BPS1-TT-MW302I1-01202012
BPS1-TT-MW302l2-01202012	BPS1-TT-MW302S-01202012	BPS1-TT-MW303D-01192012
BPS1-TT-MW303I1-01192012	BPS1-TT-MW303I2-01192012	BPS1-TT-MW303S-01232012
BPS1-TT-MW304D-01192012	BPS1-TT-MW306D-01232012	BPS1-TT-MW306I-01232012
BPS1-TT-MW306S-01232012		

## <u>Overview</u>

The sample set for NWIRP Bethpage, CTO WE44, SDG 50063-13 consisted of twenty-two (22) aqueous samples, including one (1) aqueous rinse blank sample, one (1) aqueous field blank sample, and three (3) aqueous trip blank samples. All of the aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. Nineteen (19) of the aqueous samples were analyzed for polychlorinated biphenyls (PCB) as listed above. Two field duplicate sample pairs were included with this sample delivery group (SDG): BPS1-Dup03-01192012 / BPS1-HN-MW29I-01192012 and BPS1-Dup04-01232012 / BPS1-TT-MW303S-01232012.

The samples were collected by Tetra Tech on January 19, 20, and 23, 2012 and analyzed by Trimatrix Laboratories Inc. All analyses were conducted in accordance with EPA Methods SW-846 8260B for VOC and 8082 for PCB, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

- Data completeness
- Hold times
- GC/MS System Tuning and Performance
  - Initial/continuing Calibrations
  - Method Blank Results

TO: R. SOK PAGE: 2

SDG: 50063-13

Laboratory Control Sample Recovery

- Matrix Spike/Matrix Spike Duplicate Recoveries
- Surrogate Spike Recoveries
- Internal Standard Recoveries
- Field Duplicate Precision
  - Compound Identification
- Compound Quantitation
- * Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

## **VOC**

The following VOC contaminant was detected in the method blank at the following maximum concentrations.

	<u>Maximum</u>	Action
<u>Analyte</u>	Conc. µg/L	Level µg/L
Methyl acetate (1)	0.32	1.60

Method blank for batch 1201603 affecting samples BPS1-TB03-01192012, BPS1-HN-MW29I-01192012, BPS1-FW-MW01-01192012, BPS1-FW-MW03-01192012, BPS1-TT-MW304D-01192012, BPS1-TT-MW303I2-01192012, BPS1-TT-MW303D-01192012, and BPS1-Dup03-01192012.

An action level of five times the maximum level for methyl acetate has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Acetone was detected in the field blank sample and all three (3) trip blank samples. No validation action was necessary as all samples had non-detected results for methyl acetate. As none of the samples had positive acetone detections, no validation action for field blank and trip blank acetone contamination was necessary.

The initial calibration average relative response factor (RRF) was less than the 0.05 quality control limit for 1,4-dioxane for instrument 224 on 01/17/12 and on all continuing calibration verifications (CCV).

Affected samples: All samples

Action: The non-detected 1,4-dioxane results for all samples were qualified rejected, (UR).

The continuing calibration verification (CCV) %Ds were greater than the 20% quality control limit for bromomethane and dichlorodifluoromethane for instrument 224 on 01/24/12 @ 08:42 affecting the samples listed.

#### Affected samples:

BPS1-TB03-01192012 BPS1-HN-MW29I-01192012 BPS1-FW-MW01-01192012 BPS1-FW-MW03-01192012 BPS1-TT-MW304D-01192012 BPS1-TT-MW303I2-01192012 BPS1-TT-MW303I1-01192012 BPS1-TT-MW303D-01192012 BPS1-Dup03-01192012 Action: The sample non-detected bromomethane and dichlorodifluoromethane results were qualified estimated, (UJ).

TO: R. SOK PAGE: 3

SDG: 50063-13

The CCV %Ds were greater than the 20% quality control limit for cis-1,3-dichloropropene and methyl cyclohexane for instrument 224 on 01/26/11 @ 08:46 affecting the samples listed.

#### Affected samples:

BPS1-TB04-01202012 BPS1-TB05-01232012 BPS1-RB02-01232012 BPS1-FB02-01232012 BPS1-TT-MW302S-01202012 BPS1-TT-MW302D-01202012

BPS1-TT-MW302I1-01202012 BPS1-TT-MW302I2-01202012 BPS1-TT-MW306D-01232012

BPS1-TT-MW303S-01232012

BPS1-TT-MW306I-01232012

BPS1-TT-MW306S-01232012

BPS1-Dup04-01232012

BPS1-FW-MW01-01192012

BPS1-FW-MW03-01192012

BPS1-HN-MW29I-01192012

Action: The non-detected cis-1,3-dichloropropene and methyl cyclohexane results for the samples were qualified estimated, (UJ).

#### **PCB**

The matrix spike (MS) and MS duplicate (MSD) percent recoveries (%Rs) were greater than the quality control limit for Aroclor-1016 both columns for spiked sample BPS1-TT-MW306I-01232012.

Action: The non-detected Aroclor-1016 result for the sample BPS1-TT-MW306I-01232012 was qualified estimated, (UJ).

The samples BPS1-TT-MW303D-01192012 (26.9%) and BPS1-TT-MW306D-01232012 (31.1%) had relative percent differences (RPD) between the two analytical column Aroclor-1242 positive results greater than the 25% quality control limit. The sample positive Aroclor-1242 results were qualified estimated, (J).

All method blanks were clean (non-detected for all Aroclors).

#### **Additional Comments**

The sample BPS1-FW-MW01-01192012 VOC tetrachloroethene result exceeded the highest calibration standard for the sample undiluted analysis. The sample was re-analyzed at a 2X dilution. Only the tetrachloroethene result was reported from the sample BPS1-FW-MW01-01192012 2X dilution analysis.

The Aroclor surrogate %R was greater than the quality control limit for tetrachloro-m-xylene (TCX) for the DB-XLB column for sample BPS1-FB02-01232012. No validation action was necessary as the sample had non-detected results for all Aroclors and the alternate analytical column was quality control limit compliant.

Samples were diluted for the Aroclor-1248 analysis as listed below.

Sample	Dilution
BPS1-FW-MW03-01192012	2X
BPS1-TT-MW302I2-01202012	2X
BPS1-TT-MW303D-01192012	2X
BPS1-TT-MW303I1-01192012	3X
BPS1-TT-MW302I2-01202012	2X
BPS1-TT-MW304D-01192012	4X
BPS1-TT-MW306I-01232012	2X

The rinse blank sample BPS1-RB02-01232012 had a positive detection for trichloroethene. Trichloroethene was not detected in any of the trip blanks and laboratory method blanks. No validation action was taken by the data reviewer for rinse blank contamination.

TO: R. SOK

SDG: 50063-13

The field blank sample BPS1-FB02-01232012 had positive detections for acetone, bromoform, chlorodibromomethane, and toluene. Detections of trihalomethanes are indicative of potable water. Analytes detected in the field blank were not used to establish blank action levels. No blank actions were taken.

PAGE: 4

Sample VOC and Aroclor analyte results were reported to the Limit of Detection (LOD).

Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

The DB-35 column (column 1) results were reported by the laboratory for the positive Aroclor results. The laboratory did not provide Aroclor %Ds for all of the CCVs. The data validation chemist manually calculated the CCV %Ds to verify that they were quality control compliant.

#### **EXECUTIVE SUMMARY**

**Laboratory Performance Issues:** VOC sample analyte results were qualified for initial calibration RRF and CCV %D quality control limit non-compliances.

Other Factors Affecting Data Quality: Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the SOP HW-24 Revision #2 - August 2008 Validating Volatile Organic Compounds by SW-846 Method 8260B, SOP HW-45 Revision 1 - October 2006 Data Validation SOP of Organic Analysis of PCBs by Gas Chromatography, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

TetraTech

Joseph Kalinyak

Chemist/Data Validator

7etraTech

Joseph A. Samchuck

**Data Validation Quality Assurance Officer** 

Attachments:

Appendix A - Qualified Analytical Results

Appendix B - Results as Reported by the Laboratory

Appendix C – Region II Data Validation Forms

Appendix D - Support Documentation

# Appendix A

Qualified Analytical Results

## Value Qualifier Key (Val Qual)

J- The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR - Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

## **DATA QUALIFICATION CODE (QUAL CODE)**

#### **Qualifier Codes:**

A = Lab Blank Contamination

B = Field Blank Contamination

C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)

C01 = GC/MS Tuning Noncompliance

D = MS/MSD Recovery Noncompliance

E = LCS/LCSD Recovery Noncompliance

F = Lab Duplicate Imprecision

G = Field Duplicate Imprecision

H = Holding Time Exceedance

I = ICP Serial Dilution Noncompliance

J = ICP PDS Recovery Noncompliance; MSA's r < 0.995

K = ICP Interference - includes ICS % R Noncompliance

L = Instrument Calibration Range Exceedance

M = Sample Preservation Noncompliance

N = Internal Standard Noncompliance

N01 = Internal Standard Recovery Noncompliance Dioxins

N02 = Recovery Standard Noncompliance Dioxins

N03 = Clean-up Standard Noncompliance Dioxins

O = Poor Instrument Performance (i.e., base-time drifting)

P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)

Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)

R = Surrogates Recovery Noncompliance

S = Pesticide/PCB Resolution

T = % Breakdown Noncompliance for DDT and Endrin

U = RPD between columns/detectors >40% for positive results determined via GC/HPLC

V = Non-linear calibrations; correlation coefficient r < 0.995

W = EMPC result

X = Signal to noise response drop

Y = Percent solids <30%

Z = Uncertainty at 2 sigma deviation is less than sample activity

Z1 = Tentatively Identified Compound considered presumptively present

Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPS1-Dup03-011920	12	BPS1-Dup04-	0123201	2	BPS1-FB02-0	1232012	2	BPS1-FW-M	BPS1-FW-MW01-01192012		
SDG: 50063-13	LAB_ID	1201254-09		1201310-09			1201310-08			1201254-03			
FRACTION: OV	SAMP_DATE	1/19/2012		1/23/2012			1/23/2012			1/19/2012			
MEDIA: WATER	QC_TYPE	NM		NM			NM			NM			
	UNITS	UG/L		UG/L			UG/L			UG/L			
	PCT_SOLIDS	0.0		0.0			0.0			0.0			
	DUP_OF	BPS1-HN-MW29I-01	192012	BPS1-TT-MW	303S-01	232012							
PARAMETER		RESULT VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
1,1,1-TRICHLOROETHAN		0.5 U		0.5	U		0.5	U		8.	3		
1,1,2,2-TETRACHLOROET		0.5 U		0.5	U		0.5	U		0.	5 U		
1,1,2-TRICHLOROETHANI		0.5 U		0.5	U		0.5	U		0.	5 U		
1,1,2-TRICHLOROTRIFLU		0.5 U		0.5	U		0.5	U		1.	2		
1,1-DICHLOROETHANE		0.5 U		0.5	U		0.5	U		3.	1		
1,1-DICHLOROETHENE		0.5 U		0.5	U		0.5	U		0.	5 U		
1,2,3-TRICHLOROBENZEI	NE	0.5 U		0.5	U		0.5	U		0.	5 U		
1,2,4-TRICHLOROBENZEI	NE	0.5 U		0.5	U		0.5	U		0.	5 U		
1,2-DIBROMO-3-CHLORO	PROPANE	0.5 U		0.5	U		0.5	U		0.	5 U		
1,2-DIBROMOETHANE		0.25 U		0.25	U		0.25	U		0.2	5 U		
1,2-DICHLOROBENZENE		0.5 U		0.5	U		0.5	U		0.	5 U		
1,2-DICHLOROETHANE		0.5 U		0.5	U		0.5	U			5 U		
1,2-DICHLOROPROPANE		0.5 U		0.5	U		0.5				5 U		
1,3-DICHLOROBENZENE		0.25 U		0.25	U		0.25				5 U		
1,4-DICHLOROBENZENE	<u></u>	0.5 U		0.5	U		0.5	U			5 U		
1,4-DIOXANE		25 UR	С	25	UR	С		UR	С		5 UR	С	
2-BUTANONE		0.5 U		0.5	U		0.5				5 U		
2-HEXANONE		0.5 U		0.5			0.5				5 U		
4-METHYL-2-PENTANONE		0.5 U		0.5	U		0.5				5 U		
ACETONE		1 U			U		16				1 U		
BENZENE		0.5 U		0.5			0.5				5 U		
BROMOCHLOROMETHAN	IE	0.5 U		0.5			0.5				5 U		
BROMODICHLOROMETH	ANE	0.5 U		0.5	<del></del> _		0.5	+			5 U		
BROMOFORM		0.25 U		0.25	+		4.4				5 U		
BROMOMETHANE		0.5 UJ	С	0.5	U		0.5				5 U		
CARBON DISULFIDE		0.5 U		0.5			0.5				5 U		
CARBON TETRACHLORIE	Œ	0.5 U		0.5			0.5	<del></del>	_		5 U		
CHLOROBENZENE		0.5 U		0.5	U		0.5				5 U		
CHLORODIBROMOMETH	ANE	0.25 U		0.25			3.1		ļ		5 U	1	
CHLOROETHANE		0.5 U		0.5			0.5				5 U		
CHLOROFORM		0.5 U		0.5			0.5				5 U		
CHLOROMETHANE		0.5 U		0.5		1	0.5				5 U		
CIS-1,2-DICHLOROETHE	NE	0.5 U		0.5			0.5				0	1	
CIS-1,3-DICHLOROPROP	ENE	0.1 U			UJ	С		UJ	С		1 UJ	С	
CYCLOHEXANE		0.5 U		0.5	U		0.5	U		0.	5 U		

PROJ_NO: 02230	NSAMPLE	BPS1-FW-MW03-01192012			BPS1-HN-MW	291-011	92012	BPS1-RB02-01	23201	2	BPS1-TB03-0	119201	2	
SDG: 50063-13	LAB_ID	1201254-04			1201254-02			1201310-06			1201254-01			
FRACTION: OV	SAMP_DATE	1/19/2012	-		1/19/2012			1/23/2012	•		1/19/2012			
MEDIA: WATER	QC_TYPE	NM			NM		***	NM			NM	NM		
	UNITS	UG/L	-		UG/L			UG/L	-	·-	UG/L			
	PCT_SOLIDS	0.0			0.0			0.0			0.0		•	
	DUP_OF													
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
1,1,1-TRICHLOROETHAN	IE .	0.25	J	Р	0.5	U		0.5	Ú		0.5	U		
1,1,2,2-TETRACHLOROE	THANE	0.5	U		0.5	U		0.5	U		0.5	U		
1,1,2-TRICHLOROETHAN	IE .	0.5	U		0.5	U		0.5	U		0.5	U		
1,1,2-TRICHLOROTRIFLU	<del></del>	0.5	U		0.5	U		0.5	U		0.5	U		
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U		
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5			
1,2,3-TRICHLOROBENZE	NE	0.5	U		0.5	U		0.5	U		0.5			
1,2,4-TRICHLOROBENZE	NE	0.5	U		0.5	U		0.5	U		0.5	U		
1,2-DIBROMO-3-CHLORO	PROPANE	0.5	U		0.5	U		0.5	U		0.5	U		
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U		
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U		
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U		
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U		
1,3-DICHLOROBENZENE	-	0.25	U		0.25	U		0.25	U		0.25	U		
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U			U		
1,4-DIOXANE		25	UR	С	25	UR	С	25	UR	С		UR	С	
2-BUTANONE		0.5	U		0.5	U		0.5		<u> </u>		U		
2-HEXANONE		0.5	U		0.5	U		0.5				U		
4-METHYL-2-PENTANON	IE .	0.5	U		0.5	U		0.5	U			U		
ACETONE		1	U		1	U		1	U			J	Р	
BENZENE		0.5	U		0.5	U		0.5	U			U		
BROMOCHLOROMETHA	NE	0.5	U		0.5	U		0.5	U	<b>.</b>		U		
BROMODICHLOROMETH	IANE	0.5	U		0.5	U		0.5				U		
BROMOFORM		0.25	U		0.25			0.25	U		0.25			
BROMOMETHANE		0.5	UJ	С	0.5	UJ	С	0.5	_			UJ	С	
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U			U		
CARBON TETRACHLORI	DE	0.5	U		0.5	U		0.5	U			U		
CHLOROBENZENE		0.5	U		0.5	U		0.5				U		
CHLORODIBROMOMETH	HANE	0.25	U		0.25			0.25			0.25			
CHLOROETHANE		0.5	U		0.5			0.5				i U		
CHLOROFORM		0.5	U		0.5			0.5				U		
CHLOROMETHANE		0.5	U		0.5			0.5				U		
CIS-1,2-DICHLOROETHE	NE	0.49	J	Р	0.5			0.5				i U		
CIS-1,3-DICHLOROPROF		0.1	UJ	С	_ l	UJ	С	0.1		С		U		
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	5 U		

PROJ_NO: 02230	NSAMPLE	BPS1-TB04-0	1202012	<u> </u>	BPS1-TB05-0	1232012	2	BPS1-TT-MV	/302D-0	1202012	BPS1-TT-MW302I1-01202012			
SDG: 50063-13	LAB_ID	1201287-01			1201310-01			1201287-03			1201287-04	1201287-04		
FRACTION: OV	SAMP_DATE	1/20/2012			1/23/2012			1/20/2012			1/20/2012			
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM			
	UNITS	UG/L			UG/L			UG/L			UG/L			
	PCT_SOLIDS	0.0			0.0			0.0			0.0			
	DUP_OF													
PARAMETER	<del></del>	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
1,1,1-TRICHLOROETHAN	E	0.5	U		0.5	U		0.2	3 J	Р	0.3		Р	
1,1,2,2-TETRACHLOROE	THANE	0.5	U		0.5	U		0.	5 U			5 U		
1,1,2-TRICHLOROETHAN		0.5	U		0.5	U			5 U			5 U		
1,1,2-TRICHLOROTRIFLU	OROETHANE	0.5	U		0.5	U			5 U		0.9	5 U		
1,1-DICHLOROETHANE		0.5	U		0.5	U _			5 U		0.4		P	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.6		Р		5 U		
1,2,3-TRICHLOROBENZE	NE	0.5				U	1		5 U			5 U		
1,2,4-TRICHLOROBENZE	NE	0.5				U			5 U			5 U		
1,2-DIBROMO-3-CHLORO	PROPANE	0.5	U			U			5 U			5 U		
1,2-DIBROMOETHANE		0.25	U		0.25				5 U		0.2			
1,2-DICHLOROBENZENE		0.5				U			5 U			5 U		
1,2-DICHLOROETHANE		0.5	U			U			5 U			5 U		
1,2-DICHLOROPROPANE		0.5	U			U			5 U			5 U		
1,3-DICHLOROBENZENE		0.25	U		0.25				5 U	1		5 U		
1,4-DICHLOROBENZENE		0.5	U			U			5 U			5 U		
1,4-DIOXANE		25	UR	С		UR	С		5 UR	С		UR	С	
2-BUTANONE		0.5	U			U			5 U			5 U		
2-HEXANONE		0.5	U			U			5 U			5 U		
4-METHYL-2-PENTANON	E	0.5				U			5 U	<u> </u>		5 U		
ACETONE		1.4	J	Р	2.8		Р		1 U			1 U	1	
BENZENE		0.5				i U			5 U			5 U		
BROMOCHLOROMETHA	NE	0.5				U			5 U			5 U		
BROMODICHLOROMETH	ANE	0.5				U			5 U			5 U		
BROMOFORM		0.25			0.25				5 U			5 U		
BROMOMETHANE		0.5	U			U			5 U			5 U		
CARBON DISULFIDE		0.5	U			i U			5 U	ļ		5 U		
CARBON TETRACHLORII	DE	0.5				U			5 U			5 U		
CHLOROBENZENE		0.5	U			i U	ļ <u>-</u>		5 U			5 U		
CHLORODIBROMOMETH	ANE	0.25			0.25		ļ		5 U			5 U		
CHLOROETHANE		0.5				5 U			5 U			5 U	-	
CHLOROFORM		0.5				Ū	1		5 U			5 U		
CHLOROMETHANE		0.5				U _			5 U			5 U		
CIS-1,2-DICHLOROETHE	NE		U			5 U			5 U			5 U	<del></del>	
CIS-1,3-DICHLOROPROP	ENE		UJ	С		UJ	С		1 UJ	С		1 UJ	С	
CYCLOHEXANE		0.5	U		0.5	U		0	5 U		0.	5 U		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW302I2-01202012			BPS1-TT-MV	/302S-0	1202012	BPS1-TT-M	W303D-0	1192012	BPS1-TT-MW303I1-01192012		
SDG: 50063-13	LAB_ID	1201287-05			1201287-02			1201254-08	3		1201254-07		
FRACTION: OV	SAMP_DATE	1/20/2012			1/20/2012			1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHAN	NE.	0.5	U		0.9	5 U		(	).5 ป		0.	5 U	
1,1,2,2-TETRACHLOROE	THANE	0.5	U		0.9	5 U		(	).5 U			5 U	
1,1,2-TRICHLOROETHAN	NE	0.5	U		0.9	5 U		(	).5 U		0.	5 U	
1,1,2-TRICHLOROTRIFLI	UOROETHANE	0.5	U		0.9	5 U		(	).5 U		0.	5 U	
1,1-DICHLOROETHANE		0.5	U		0.9	5 U		(	).5 U		1.	6	
1,1-DICHLOROETHENE		0.5	U		0.9	5 U			).5 U		1.		
1,2,3-TRICHLOROBENZE	ENE	0.5	U		0.9	5 U			).5 U			5 U	
1,2,4-TRICHLOROBENZE	ENE	0.5	Ü		0.9	5 U			).5 U			5 U	
1,2-DIBROMO-3-CHLOR	OPROPANE	0.5	U		0.5 U			0.5 U			0.5 U		
1,2-DIBROMOETHANE		0.25	U		0.25 U			0.25 U			0.25 U		_
1,2-DICHLOROBENZENE	<u> </u>	0.5	U		0.5 U			0.5 U				.5 U	
1,2-DICHLOROETHANE		0.5	U		0.5 U			0.5 U		<u> </u>	0.5 U		
1,2-DICHLORCPROPANI	E	0.5	U		0.	5 U		0.5 U			0.5 U		
1,3-DICHLOROBENZENE		0.25	U		0.25 U				25 U			5 U	
1,4-DICHLOROBENZENE		0.5	U			5 U			).5 U			.5 U	
1,4-DIOXANE		<u> </u>	UR	С		5 UR	С		25 UR	С		5 UR	С
2-BUTANONE		0.5	U			5 U			D.5 U			.5 U	
2-HEXANONE		0.5	U			5 U			).5 U			.5 U	
4-METHYL-2-PENTANON	NE	0.5	U			5 U	<u> </u>	(	D.5 U			.5 U	_
ACETONE		1	U			1 U			1 U			1 U	
BENZENE		0.5	U			5 U			0.5 U	<u> </u>		.5 U	
BROMOCHLOROMETHA	NE	0.5				5 U			).5 U			.5 U	
BROMODICHLOROMETI	HANE	0.5				5 U			).5 U			.5 U	
BROMOFORM		0.25				5 U			25 U			!5 U	
BROMOMETHANE		0.5				5 U			).5 UJ	С		.5 UJ	С
CARBON DISULFIDE		0.5				5 U			0.5 U	<b></b>		.5 U	
CARBON TETRACHLOR	IDE	0.5	U			5 U			0.5 U			.5 U	<u> </u>
CHLOROBENZENE		0.5				5 U			).5 U	ļ		.5 U	1
CHLORODIBROMOMETI	HANE	0.25				5 U			25 U			25 U	<u> </u>
CHLOROETHANE		0.5				5 U	ļ		0.5 U			.5 U	1
CHLOROFORM		0.5				5 U			).5 U			.5 U	
CHLOROMETHANE		0.5				5 U			0.5 U		0.5 U		
CIS-1,2-DICHLOROETHE	ENE	0.5	1			5 U			0.5 U			2	
CIS-1,3-DICHLOROPRO	PENE		UJ	С		1 UJ	С		D.1 U			.1 U	
CYCLOHEXANE		0.5	U	[ <u> </u>	0.	5 U			D.5 U		0	.5 U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	30312-0	1192012	BPS1-TT-MV	V303S-0	1232012	BPS1-TT-MV	V304D-0	1192012	BPS1-TT-MW306D-01232012		
SDG: 50063-13	LAB_ID	1201254-06			1201310-03		<u> </u>	1201254-05	_		1201310-02		
FRACTION: OV	SAMP_DATE	1/19/2012			1/23/2012			1/19/2012	•		1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM	-		NM		
<u></u>	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		-
	DUP_OF												
PARAMETER	\ <del>=</del>	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHA	NE	0.5	U			.5 U			5 U			.5 U	
1,1,2,2-TETRACHLORO	ETHANE	0.5	U		0.	.5 U			5 U		0.5 U		
1,1,2-TRICHLOROETHA	NE	0.5	U		0.	.5 U			5 U			.5 U	
1,1,2-TRICHLOROTRIFL	UOROETHANE	0.5	U		0.	.5 U			5 U			.5 U	
1,1-DICHLOROETHANE		0.5	U		0.	5 U			.5 U			.5 U	
1,1-DICHLOROETHENE		0.5	U		0.	.5 U			5 U			.5 U	
1,2,3-TRICHLOROBENZ	ZENE	0.5	U		0.5 U				0.5 U			.5 U	
1,2,4-TRICHLOROBENZ	ZENE	0.5	U		0.5 U				0.5 U			.5 ป	
1,2-DIBROMO-3-CHLOF	ROPROPANE	0.5	U		0.5 U				0.5 U			.5 U	
1,2-DIBROMOETHANE		0.25			0.25 U				0.25 U			0.25 U	
1,2-DICHLOROBENZEN	IE .	0.5	U		0.	.5 U			0.5 U		0.5 U		
1,2-DICHLOROETHANE		0.5	U			.5 U			0.5 U		0.5 U		
1,2-DICHLOROPROPAN	NE	0.5	U			.5 U			.5 U			.5 U	
1,3-DICHLOROBENZEN	IE .	0.25			0.25 U				25 U			25 U	
1,4-DICHLOROBENZEN	IE	0.5	U			.5 U			.5 U			.5 U	
1,4-DIOXANE		25	UR	С		25 UR	C		25 UR	C		25 UR	C
2-BUTANONE		0.5	U			.5 U			.5 U			.5 U	
2-HEXANONE		0.5				.5 U			.5 U			.5 U	<u> </u>
4-METHYL-2-PENTANO	NE	0.5	U			.5 U	<u> </u>		.5 U			.5 U	
ACETONE		1	U			1 U			1 U			1 U	
BENZENE		0.5				.5 U			.5 U			.5 U	
BROMOCHLOROMETH	ANE	0.5				.5 U			.5 U			.5 U	
BROMODICHLOROMET	THANE	0.5	U	<u> </u>		.5 U			.5 U			.5 U	
BROMOFORM		0.25	U			25 U			25 U			25 U	-
BROMOMETHANE		0.5	บป	С		.5 U			.5 UJ	С		.5 U	
CARBON DISULFIDE		0.5	U			.5 U			.5 U			.5 U	
CARBON TETRACHLO	RIDE	0.5	U			.5 U			.5 U			.5 U	1
CHLOROBENZENE		0.5	+			.5 U			.5 U			.5 U	<del> </del>
CHLORODIBROMOME	THANE	0.25				25 U			25 U			25 U	
CHLOROETHANE			U			.5 U			.5 U			.5 U	
CHLOROFORM			U			.5 U			.5 U			.5 U	
CHLOROMETHANE			U			.5 U			.5 U		0.5 U		-
CIS-1,2-DICHLOROETH	IENE		U			.5 U			.5 U			.5 U	
CIS-1,3-DICHLOROPRO	OPENE	0.1	U			.1 UJ	С		.1 U		_	.1 UJ	С
CYCLOHEXANE		0.5	Ü		0	.5 U		0	.5 U		0	.5 U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW:	3061-012	232012	BPS1-TT-MW306S-01232012					
SDG: 50063-13	LAB_ID	1201310-04			1201310-07					
FRACTION: OV	SAMP_DATE	1/23/2012			1/23/2012		-			
MEDIA: WATER	QC_TYPE	NM			NM					
	UNITS	UG/L			UG/L					
	PCT_SOLIDS	0.0	•		0.0					
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD			
1,1,1-TRICHLOROETHAN	IE .	0.5	Ü		0.5	U				
1,1,2,2-TETRACHLOROE	THANE	0.5	U		0.5	U				
1,1,2-TRICHLOROETHAN	IE	0.5	U		0.5	U				
1,1,2-TRICHLOROTRIFLU	JOROETHANE	0.5	U		0.5	U				
1,1-DICHLOROETHANE		0.5	U		0.5	U				
1,1-DICHLOROETHENE		0.5	U		0.5	U				
1,2,3-TRICHLOROBENZE	NE	0.5	U		0.5	U				
1,2,4-TRICHLOROBENZE	:NE	0.5	U		0.5	U				
1,2-DIBROMO-3-CHLORO	PROPANE	0.5	U		0.5	U				
1,2-DIBROMOETHANE		0.25	U		0.25	U				
1,2-DICHLOROBENZENE		0.5	U		0.5	U				
1,2-DICHLOROETHANE		0.5	U	1	0.5	U				
1,2-DICHLOROPROPANE		0.5	U		0.5	U				
1,3-DICHLOROBENZENE		0.25	U		0.25	U				
1,4-DICHLOROBENZENE		0.5	U		0.5	U				
1,4-DIOXANE		25	UR	С	25	UR	С			
2-BUTANONE		0.5	U		0.5	U				
2-HEXANONE		0.5	U		0.5	U				
4-METHYL-2-PENTANON	E	0.5	U		0.5	U				
ACETONE		1	U		1	U				
BENZENE		0.5	U		0.5	U				
BROMOCHLOROMETHAI	NE	0.5	U		0.5	U				
BROMODICHLOROMETH	IANE	0.5	U		0.5	U				
BROMOFORM		0.25	U		0.25	U				
BROMOMETHANE		0.5	U		0.5	U				
CARBON DISULFIDE		0.5			0.5	U				
CARBON TETRACHLORI	DE	0.5	U		0.5	U				
CHLOROBENZENE		0.5	U		0.5	U				
CHLORODIBROMOMETH	IANE	0.25	U		0.25	U				
CHLOROETHANE		0.5	U		0.5	U				
CHLOROFORM		0.5			0.5					
CHLOROMETHANE		0.5			0.5	U				
CIS-1,2-DICHLOROETHE	NE	0.5	U		0.5	U				
CIS-1,3-DICHLOROPROPENE		0.1	UJ	С	0.1	UJ	C .			
CYCLOHEXANE		0.5	U		0.5	U				

PROJ_NO: 02230	NSAMPLE BPS1-Dup03-011920			12	BPS1-Dup04-0	012320	2	BPS1-FB02-0	123201	2	BPS1-FW-M	V01-011	92012	
SDG: 50063-13	LAB_ID	1201254-09	1201254-09			1201310-09			1201310-08			1201254-03		
FRACTION: OV	SAMP_DATE	1/19/2012	1/19/2012			1/23/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM			
	UNITS	UG/L		UG/L			UG/L			UG/L				
	PCT_SOLIDS	0.0			0.0	0.0					0.0	0.0		
	DUP_OF	BPS1-HN-MW29I-01192012		BPS1-TT-MW303S-01232012										
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DICHLORODIFLUORON	METHANE	0.5	ŲJ	С	0.5	U		0.5	U			U		
ETHYLBENZENE		0.25	U		0.25	U		0.25			0.2			
ISOPROPYLBENZENE		0.5	U		0.5	U			U			5 U		
M+P-XYLENES		0.5	U		0.5	U		0.5	J			5 U		
METHYL ACETATE		0.5	U		0.5	U			U		0.	5 U		
METHYL CYCLOHEXAN	· <u> </u>	0.5	U			UJ	С	_	UJ	С		UJ	С	
METHYL TERT-BUTYL	ETHER	0.5	U		0.5				U			υ		
METHYLENE CHLORID	E	0.5			0.5				U			5 U		
O-XYLENE		0.25	U	}	0.25	U		0.25				5 U		
STYRENE		0.1			0.1	U		0.1				ı∤u		
TETRACHLOROETHEN	IE	0.46	J	Р	1.8				U		20			
TOLUENE		0.1			0.1			0.51	_	Р		ıυ		
TRANS-1,2-DICHLORO	ETHENE	0.5			0.5				U			5 J	Р	
TRANS-1,3-DICHLORO	PROPENE	0.25			0.25			0.25	+			5 U		
TRICHLOROETHENE		0.5			2.7			<del></del>	U		2			
TRICHLOROFLUOROM	IETHANE	0.5			0.5				U			5 U		
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.	5 U		

PROJ_NO: 02230	NSAMPLE	BPS1-FW-MW03-01192012			BPS1-HN-MW	/29I-01	92012	BPS1-RB02-0	123201	2	BPS1-TB03-01192012			
SDG: 50063-13	LAB_ID	1201254-04	1201254-04			1201254-02			1201310-06			1201254-01		
FRACTION: OV	SAMP_DATE	1/19/2012	1/19/2012			1/19/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM	NM			NM		
	UNITS	UG/L		UG/L 0.0			UG/L			UG/L				
	PCT_SOLIDS	0.0					0.0			0.0				
	DUP_OF													
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DICHLORODIFLUOROME	THANE	0.5	UJ	С	0.5	UJ	С	0.5	U		0.5	UJ	С	
ETHYLBENZENE	_	0.25	U		0.25	U		0.25	U		0.25			
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U		
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5			
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5			
METHYL CYCLOHEXANE		0.5	IJ	С	0.5	UJ	С	0.5		С	0.5	U		
METHYL TERT-BUTYL ET	HER	0.5	U		0.5	U		0.5	U		0.5	U		
METHYLENE CHLORIDE		0.5	บ		0.5	U		0.5	U		0.5	U		
O-XYLENE		0.25	บ		0.25	U		0.25	U		0.25	U		
STYRENE		0.1	U		0.1			0.1			0.1	U		
TETRACHLOROETHENE		68			0.49		Р	0.5	U		0.5			
TOLUENE		0.1			0.1	U		0.1			0.1			
TRANS-1,2-DICHLOROET	HENE	0.5			0.5	U		0.5	U		0.5			
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	+		0.25	U		0.25			
TRICHLOROETHENE		3.7				U		6.5			0.5			
TRICHLOROFLUOROMET	HANE	0.5	U			U		0.5			0.5	<b></b>		
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U		

PROJ_NO: 02230	BPS1-TB04-01202012			BPS1-TB05-0	123201	2	BPS1-TT-MW	302D-0	1202012	BPS1-TT-MW	30211-0	1202012		
SDG: 50063-13	LAB_ID 1201287-01				1201310-01			1201287-03			1201287-04			
FRACTION: OV	SAMP_DATE	1/20/2012			1/23/2012	1/23/2012					1/20/2012			
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM			
	UNITS	UG/L			UG/L	UG/L 0.0					UG/L			
	PCT_SOLIDS	0.0		0.0						0.0				
	DUP_OF													
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DICHLORODIFLUORON	METHANE	0.5	U		0.5	U		0.5	U		0.5	U		
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U		
ISOPROPYLBENZENE		0.5			0.5			0.5	U		0.5	U		
M+P-XYLENES		0.5			0.5	U		0.5	U		0.5			
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U		
METHYL CYCLOHEXAN	IE	<del></del>	UJ	С	0.5	UJ	С	0.5	UJ	С	0.5	UJ	С	
METHYL TERT-BUTYL	ETHER	0.5	U		0.5			0.5	U		0.5	U		
METHYLENE CHLORID	E	0.5			0.5	U		0.5	U		0.5	U		
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U		
STYRENE		0.1	U		0.1			0.1	U		0.1	U		
TETRACHLOROETHEN	E	0.5	U		0.5	U		0.33	J	Р	0.29	J	Р	
TOLUENE		0.1	U		0.1			0.1			0.1	υ		
TRANS-1,2-DICHLORO	ETHENE	0.5			0.5			0.5	U		0.5	U		
TRANS-1,3-DICHLORO	PROPENE	0.25			0.25			0.25	U		0.25	U		
TRICHLOROETHENE		0.5			0.5		<u> </u>	3.9			1.7			
TRICHLOROFLUOROM	ETHANE	0.5			0.5			0.5	_		0.5			
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U		

9 of 12 3/28/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	30212-0	1202012	BPS1-TT-MW	302S-0	1202012	BPS1-TT-MW	303D-0	1192012	BPS1-TT-MV	V303I1-0	1192012	
SDG: 50063-13	LAB_ID				1201287-02	1201287-02				•	1201254-07			
FRACTION: OV	SAMP_DATE				1/20/2012			1/19/2012			1/19/2012			
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM			
	UNITS	UG/L			UG/L	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0			
	DUP_OF													
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DICHLORODIFLUOROME	ETHANE	0.5	U		0.5	U		0.5	UJ	С	0.	5 UJ	С	
ETHYLBENZENE		0.25	U		0.25			0.25				5 U		
ISOPROPYLBENZENE		0.5	U		0.5	U	_	0.5			0.	5 U		
M+P-XYLENES		0.5	U		0.5			0.5			0.	5 U		
METHYL ACETATE	· _	0.5	U		0.5	U		0.5	U		0.	5 U		
METHYL CYCLOHEXANE	Ē	0.5	UJ	С	0.5	UJ	С	0.5	U			5 U		
METHYL TERT-BUTYL E	THER	0.5	U		0.5	U		0.5	<del></del>			5 U		
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U			5 U		
O-XYLENE		0.25	U		0.25	U		0.25	U		0.2	5 U		
STYRENE		0.1	U		0.1			0.1	ļ			1 U		
TETRACHLOROETHENE		0.5	U		0.5			0.5			8			
TOLUENE		0.1			0.1			0.1				1 U		
TRANS-1,2-DICHLOROE	THENE	0.5	U		0.5			0.5				5 U		
TRANS-1,3-DICHLOROP	ROPENE	0.25	U		0.25	_		0.25				5 U		
TRICHLOROETHENE		1.8			0.5		_	0.51		Р	1			
TRICHLOROFLUOROME	THANE	0.5	U		0.5	_		0.5				5 U		
VINYL CHLORIDE		0.5	U		0.5	U	<u> </u>	0.5	U		0.	5 U		

PROJ_NO: 02230	NSAMPLE BPS1-TT-MW303I2-01192012			1192012	BPS1-TT-MW303S-01232012			BPS1-TT-MW	304D-0	1192012	BPS1-TT-MW306D-01232012			
SDG: 50063-13	LAB_ID	1201254-06			1201310-03	1201310-03					1201310-02			
FRACTION: OV	SAMP_DATE	1/19/2012	1/19/2012			1/23/2012					1/23/2012			
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM			
	UNITS	UG/L			UG/L			UG/L			UG/L			
	PCT_SOLIDS	0.0			0.0	0.0					0.0			
	DUP_OF													
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DICHLORODIFLUORO	METHANE	0.5	UJ	С	0.5	U		0.5	UJ	С		5 U		
ETHYLBENZENE		0.25	U		0.25	U		0.25		_		5 U		
ISOPROPYLBENZENE		0.5	U		0.5			0.5				5 U		
M+P-XYLENES		0.5	U		0.5			0.5				5 U		
METHYL ACETATE		0.5	U		0.5			0.5				5 U		
METHYL CYCLOHEXA	NE	0.5	U		0.5		С	0.5				5 UJ	С	
METHYL TERT-BUTYL	ETHER	0.5	U		0.5			0.5	J			5 U		
METHYLENE CHLORIC	DE	0.5			0.5				U			5 U		
O-XYLENE		0.25	U		0.25	U		0.25			<del>-</del>	5 U		
STYRENE		0.1			0.1			0.1	<del>                                     </del>			1 U		
TETRACHLOROETHEN	NE	0.94	J	Р	1.9	l			U			4 J	Р	
TOLUENE		0.1	U		0.1	·			U			1 U	_	
TRANS-1,2-DICKLORC	ETHENE	0.5	U		0.5				U			5 U		
TRANS-1,3-DICHLORC	PROPENE	0.25	-		0.25	U		0.25				5 U		
TRICHLOROETHENE		1.6			2.7				U		2			
TRICHLOROFLUORON	METHANE	0.5			0.5		ļ <u> </u>		U			5 U		
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.	5 U		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	306I-012	232012	BPS1-TT-MW306S-01232012					
SDG: 50063-13	LAB_ID	1201310-04			1201310-07					
FRACTION: OV	SAMP_DATE	1/23/2012			1/23/2012					
MEDIA: WATER	QC_TYPE	NM		···	NM					
	UNITS	UG/L			UG/L					
	PCT_SOLIDS	0.0			0.0					
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD			
DICHLORODIFLUOROMET	THANE	0.5	U		0.5	U				
ETHYLBENZENE	0.25	U		0.25	U					
ISOPROPYLBENZENE	0.5	U		0.5						
M+P-XYLENES	0.5	U		0.5	U					
METHYL ACETATE	0.5	U		0.5	ļ					
METHYL CYCLOHEXANE		0.5	UJ	С	0.5	UJ	С			
METHYL TERT-BUTYL ETI	HER	0.5	U		0.5	U				
METHYLENE CHLORIDE		0.5	U	ļ	0.5	U				
O-XYLENE		0.25	U	_	0.25	-				
STYRENE		0.1	U		0.1	U				
TETRACHLOROETHENE		0.5	U		0.4		Р			
TOLUENE		0.1	U			U				
TRANS-1,2-DICHLOROETI	HENE	0.5			0.5	_				
TRANS-1,3-DICHLOROPR	0.25			0.25						
TRICHLOROETHENE		0.54		Р	0.5	_				
TRICHLOROFLUOROMET	HANE	0.5			0.5					
VINYL CHLORIDE		0.5	U		0.5	U				

PROJ_NO: 02230	NSAMPLE	BPS1-Dup03-0	0119201	2	BPS1-Dup03-0	0119201	2RE1	BPS1-Dup04-0	123201	2	BPS1-Dup04-0	0123201	I2RE1
SDG: 50063-13	LAB_ID	1201254-09			1201254-09RE	≣1		1201310-09			1201310-09RE	Ξ1	
FRACTION: PCB	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM	-	•	NM		
	UNITS	UG/L		-	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW	291-011	92012	BPS1-HN-MW	/291-011	92012	BPS1-TT-MW	303S-01	232012	BPS1-TT-MW	303S-0	1232012
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					0.66						0.2		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	υ				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-FB02-0	1232012	2	BPS1-FW-MW	/01-011	92012	BPS1-FW-MW	/01-011	92012RE1	BPS1-FW-MW	/03-011	92012
SDG: 50063-13	LAB_ID	1201310-08			1201254-03			1201254-03RE	<b>≣</b> 1		1201254-04		
FRACTION: PCB	SAMP_DATE	1/23/2012			1/19/2012			1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		-	0.0			0.0		
	DUP_OF				-								
PARAMETER	•	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U					0.08	U	
AROCLOR-1221		0.08	U		0.08	U		_			0.08	U	
AROCLOR-1232	-	0.08	U		0.08	U					0.08	U	
AROCLOR-1242		0.08	U		0.08	U					0.08	U	
AROCLOR-1248		0.08	U					0.46					
AROCLOR-1254		0.08	U		0.08	U					0.08	U	
AROCLOR-1260		0.08	U		0.08	U					0.08	υ	
AROCLOR-1262		0.08	Ü		0.08	U					0.08	U	
AROCLOR-1268		0.08	U		0.08	U					0.08	U	

PROJ_NO: 02230	NSAMPLE	BPS1-FW-MW	/03-011	92012RE1	BPS1-HN-MW	29I-011	92012	BPS1-HN-MW	29I-01 ²	192012RE1	BPS1-RB02-0	123201	2
SDG: 50063-13	LAB_ID	1201254-04RE	<u> </u>	-	1201254-02			1201254-02R	≣1		1201310-06		
FRACTION: PCB	SAMP_DATE	1/19/2012			1/19/2012			1/19/2012	-		1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		-	NM		
	UNITS	UG/L			UG/L	-		UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016					0.08	Ü					0.094	U	
AROCLOR-1221					0.08	U					0.094	U	
AROCLOR-1232					0.08	U					0.094	U	
AROCLOR-1242					0.08	U					0.094	U	
AROCLOR-1248		1.9			-			0.63			0.094	U	
AROCLOR-1254					0.08	U			<u> </u>		0.094	U	
AROCLOR-1260					0.08	Ü					0.094	U	
AROCLOR-1262					0.08	U					0.094	U	
AROCLOR-1268					0.08	U					0.094	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	302D-0	1202012	BPS1-TT-MW	302D-0	1202012RE1	BPS1-TT-MW3	30211-0	1202012	BPS1-TT-MW	30211-0	1202012RE
SDG: 50063-13	LAB_ID	1201287-03			1201287-03RE	Ξ1		1201287-04			1201287-04RE	Ξ1	
FRACTION: PCB	SAMP_DATE	1/20/2012			1/20/2012			1/20/2012			1/20/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	Ü				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	Ü					0.08	U				
AROCLOR-1248					0.85						1.2		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U			ļ	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	30212-0	1202012	BPS1-TT-MW	30212-0	1202012RE1	BPS1-TT-MW	302S-0	1202012	BPS1-TT-MW	302S-0	1202012RE1
SDG: 50063-13	LAB_ID	1201287-05			1201287-05R	≣1		1201287-02		-	1201287-02RE	Ξ1	
FRACTION: PCB	SAMP_DATE	1/20/2012			1/20/2012			1/20/2012			1/20/2012		
MEDIA: WATER	QC_TYPE	NM	-		NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF			•									
PARAMETER	1	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	Ü					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					1.9		1				0.43		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

5 of 9 3/29/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	303D-01	1192012	BPS1-TT-MW	303D-0	1192012RE1	BPS1-TT-MW	30311-0	1192012	BPS1-TT-MW	30311-0	1192012RE1
SDG: 50063-13	LAB_ID	1201254-08			1201254-08R	E1		1201254-07			1201254-07RE	1	
FRACTION: PCB	SAMP_DATE	1/19/2012			1/19/2012			1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		·
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.085	U					0.08	U				
AROCLOR-1221		0.085	U					0.08	U				
AROCLOR-1232		0.085	U					0.08	U				
AROCLOR-1242	1 1111				1.6	J	U				3.9		
AROCLOR-1248		0.085	U					0.08	U				
AROCLOR-1254		0.085	Ù					0.08	U				
AROCLOR-1260		0.085	U					0.08	U				
AROCLOR-1262		0.085	U					0.08	U				
AROCLOR-1268		0.085	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	30312-0	1192012	BPS1-TT-MW	30312-0	1192012RE1	BPS1-TT-MW	303S-0	1232012	BPS1-TT-MW	303S-0	1232012RE1
SDG: 50063-13	LAB_ID	1201254-06			1201254-06RE	Ξ1		1201310-03			1201310-03RE	<b>E</b> 1	
FRACTION: PCB	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					2.4						0.21		
AROCLOR-1254	·	0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	304D-0	1192012	BPS1-TT-MW	304D-0	1192012RE1	BPS1-TT-MW	306D-0	1232012	BPS1-TT-MW3	306D-0	1232012RE1
SDG: 50063-13	LAB_ID	1201254-05			1201254-05RI	≣1		1201310-02			1201310-02RE	:1	
FRACTION: PCB	SAMP_DATE	1/19/2012		·	1/19/2012			1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242	•	0.08	U								0.61	J	U
AROCLOR-1248					4.2			0.08	U				
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	บ				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	306I-01	232012	BPS1-TT-MW	/3061-01	232012RE1	BPS1-TT-MW	306S-0°	1232012	BPS1-TT-MW	306S-0 ⁻	232012RE1
SDG: 50063-13	LAB_ID	1201310-04			1201310-04R	E1		1201310-07	-		1201310-07RE	Ξ1	
FRACTION: PCB	SAMP_DATE	1/23/2012			1/23/2012	-		1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	UJ	D				0.08	U		·		
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232	•	0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					1.8						0.54		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	Ü					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				



# **Tetra Tech**

## INTERNAL CORRESPONDENCE

TO:

R. SOK

DATE:

March 28, 2012

FROM:

**MEGAN CARSON** 

COPIES:

**DV FILE** 

SUBJECT:

INORGANIC DATA VALIDATION- TOTAL CALCIUM, CHROMIUM, IRON, AND

SODIUM, AND FILTERED CHROMIUM AND IRON, TOC, AND HEXAVALENT

**CHROMIUM** 

**NWIRP BETHPAGE, CTO WE44** 

SDG 50063-13

**SAMPLES:** 

20/Water/

BPS1-Dup03-01192012 BPS1-Dup04-01232012 BPS1-FB02-01232012 BPS1-FW-MW01-01192012 BPS1-FW-MW03-01192012 BPS1-HN-MW29I-01192012 BPS1-RB02-01232012 BPS1-TT-MW301D-01232012 BPS1-TT-MW302D-01202012 BPS1-TT-MW302I1-01202012 BPS1-TT-MW302I2-01202012 BPS1-TT-MW302S-01202012 BPS1-TT-MW303D-01192012 BPS1-TT-MW303I1-01192012 BPS1-TT-MW303I2-01192012 BPS1-TT-MW303S-01232012 BPS1-TT-MW304D-01192012 BPS1-TT-MW306D-01232012 BPS1-TT-MW306I-01232012 BPS1-TT-MW306S-01232012

### **Overview**

The sample set for NWIRP Bethpage, SDG 50063-13, consists of eighteen (18) aqueous samples, one field blank, and one rinsate blank. This SDG contained two field duplicate pairs: BPS1-Dup03-01192012/BPS1-HN-MW29I-01192012 and BPS1-Dup04-01232012/BPS1-TT-MW303S-01232012.

All samples (except BPS1-TT-MW301D-01232012) were analyzed for total chromium and iron. Samples BPS1-HN-MW29I-01192012 and BPS1-TT-MW302D-01202012 were analyzed for total calcium and sodium. Sample BPS1-TT-MW303I1-01192012 was analyzed for filtered chromium and iron. Samples BPS1-FB02-01232012, BPS1-RB02-01232012, BPS1-TT-MW301D-01232012, BPS1-TT-MW303I2-01192012, BPS1-TT-MW306I-01232012, and BPS1-TT-MW306S-01232012 were analyzed for hexavalent chromium. Samples BPS1-TT-MW306D-01232012, BPS1-TT-MW306I-01232012, and BPS1-TT-MW306S-01232012 were analyzed for total organic carbon (TOC). The samples were collected by Tetra Tech on January 19th, 20th, 23rd, 2012 and analyzed by Trimatrix Laboratories. Iron, calcium, and sodium analyses were conducted using method 6010C. Chromium analyses were conducted using method 5310C. Hexavalent chromium analyses were conducted using method 7196A.

These data were evaluated based on the following parameters:

- Data Completeness
- Holding Times
- Initial and Continuing Calibration Verification Results
- Laboratory Method / Preparation Blank Analyses
- ICP Interference Results
- Matrix Spike / Matrix Spike Duplicate Recoveries
  - Field Duplicate Precision

To: R. Sok Page 2 of 3 3/28/2012

- * Laboratory Duplicate Results
- Laboratory Control Standard Results
- ICP Serial Dilution Results
- Detection Limits
- Analyte Quantitation

### Metals:

Field duplicate pair BPS1-Dup04-01232012/BPS1-TT-MW303S-01232012 had a difference > 4X LOQ for iron. The iron results for the sample pair were qualified as estimated (J). No further validation action was warranted as the other field duplicate pair in the SDG was within quality control limits.

### Hexavalent Chromium:

All sample results were within quality control limits.

### Notes

Positive results greater than the detection limit (DL) but less than the limit of quantitation (LOQ) were qualified as estimated (J).

The matrix spike and matrix spike duplicate of sample BPS1-TT-MW306I-01232012 for hexavalent chromium for batch 1201753 had a relative percent difference (RPD) > 20%. The percent recoveries for the matrix spike and matrix spike duplicate were within quality control limits. No validation action was warranted based on the RPD non-compliances alone.

The field duplicate sample BPS1-Dup03-01192012 was not analyzed for calcium and sodium because it was not marked for analysis on the chain of custody record. The original sample BPS1-HN-MW29I-01192012 was analyzed for calcium and sodium. No action was taken but this item is noted because a comparison of the results for field duplicate precision could not be conducted.

### **Executive Summary**

Laboratory Performance: None.

Other Factors Affecting Data Quality: Field duplicate imprecisionnon was noted for iron in the sample pair BPS1-Dup04-01232012/BPS1-TT-MW303S-01232012. Iron results in the affected pair were qualified as estimated.

The data for these analyses were reviewed with reference to the U.S. EPA Region II "Validation of metals for the Contract Laboratory Program based on SOW ILMO5.3 (SOP Revision 13)", September 2006 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech Megan Carson

Chemist/Data Validator

an Carmen

To: R. Sok Page 3 of 3 3/28/2012

Tetra Tech

Joseph A. Samchuck Quality Assurance Officer

Attachments:

- 1.
- Appendix A Qualified Analytical Results
  Appendix B Results as reported by the Laboratory
  Appendix C Region II Worksheets
  Appendix D Support Documentation 2.
- 3.
- 4.

# APPENDIX A QUALIFIED ANALYTICAL RESULTS

### **Qualifier Codes:**

Lab Blank Contamination

В = Field Blank Contamination

С = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)

C01 = GC/MS Tuning Noncompliance

D = MS/MSD Recovery Noncompliance

Ε = LCS/LCSD Recovery Noncompliance

F = Lab Duplicate Imprecision

G = Field Duplicate Imprecision

Н = Holding Time Exceedance

ICP Serial Dilution Noncompliance

J ICP PDS Recovery Noncompliance; MSA's r < 0.995

Κ ICP Interference - includes ICS % R Noncompliance

L Instrument Calibration Range Exceedance

М Sample Preservation Noncompliance

Ν Internal Standard Noncompliance

N01 Internal Standard Recovery Noncompliance Dioxins

N02 Recovery Standard Noncompliance Dioxins

N03 Clean-up Standard Noncompliance Dioxins

0 Poor Instrument Performance (i.e., base-time drifting)

Р Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)</li> Other problems (can encompass a number of issues; i.e.chromatography,interferences,

Q etc.)

R = Surrogates Recovery Noncompliance

S = Pesticide/PCB Resolution

Т % Breakdown Noncompliance for DDT and Endrin

U RPD between columns/detectors >40% for positive results determined via GC/HPLC

V Non-linear calibrations; correlation coefficient r < 0.995

W = EMPC result

Χ = Signal to noise response drop

Υ = Percent solids <30%

Ζ = Uncertainty at 2 sigma deviation is less than sample activity

**Z**1 = Tentatively Identified Compound considered presumptively present

**Z**2 = Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPS1-Dup03-0	0119201	12	BPS1-Dup04-0	012320	12	BPS1-FB02-0	123201	2	BPS1-FW-MW	/01-011	92012
SDG: 50063-13	LAB_ID	1201254-09			1201310-09			1201310-08			1201254-03		
FRACTION: M	SAMP_DATE	1/19/2012			1/23/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW	291-011	92012	BPS1-TT-MW	303S-0	1232012						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM	•												
CHROMIUM		5.2			4.2			0.79	J	Р	4.4		
IRON		93			210	J	G	320			860		
SODIUM													

PROJ_NO: 02230	NSAMPLE	BPS1-FW-MV	V03-011	92012	BPS1-HN-MV	/291-01	192012	BPS1-RB02-0	123201	2	BPS1-TT-MW	302D-0	1202012
SDG: 50063-13	LAB_ID	1201254-04			1201254-02			1201310-06			1201287-03		
FRACTION: M	SAMP_DATE	1/19/2012	-		1/19/2012	•		1/23/2012			1/20/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L	-		UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF											_	
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM					24000						8000		
CHROMIUM		4.6			5.5			0.5	U		2.3		
IRON		110			83	1		12	! J	Р	75		
SODIUM					7800						24000		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-M	N302l1-0	01202012	BPS1-TT-MW	/30212-0	1202012	BPS1-TT-MW	302S-0	1202012	BPS1-TT-MW	303D-0	1192012
SDG: 50063-13	LAB_ID	1201287-04			1201287-05			1201287-02			1201254-08		
FRACTION: M	SAMP_DATE	1/20/2012			1/20/2012			1/20/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L		•	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM													
CHROMIUM		1.	.4		5.1			0.63	J	Р	5.3		
IRON		3	4		59	}		22			520		
SODIUM													

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW303I1-01192012		BPS1-TT-MW303I2-01192012			BPS1-TT-MW303S-01232012			BPS1-TT-MW304D-01192012			
SDG: 50063-13	LAB_ID	1201254-07			1201254-06			1201310-03			1201254-05		
FRACTION: M	SAMP_DATE	1/19/2012		1/19/2012			1/23/2012			1/19/2012			
MEDIA: WATER	QC_TYPE	NM I		NM			NM			NM			
	UNITS	UG/L		UG/L			UG/L			UG/L			
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF									•			
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM	•												
CHROMIUM		5.8			2.4			2.	7		4.5		
IRON		6000			69			6	6 J	G	160		
SODIUM													

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW	/306D-0	1232012	BPS1-TT-MV	BPS1-TT-MW306I-01232012				BPS1-TT-MW306S-01232012			
SDG: 50063-13	LAB_ID	1201310-02			1201310-04		_	1201310-07	1201310-07				
FRACTION: M	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012	1/23/2012				
MEDIA: WATER	QC_TYPE	NM	_		NM			NM	NM				
	UG/L			UG/L		UG/L 0.0							
	PCT_SOLIDS	0.0			0.0								
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD			
CALCIUM	<del>- · · · · ·</del>												
CHROMIUM		1.2	2		2.3			1.3					
IRON		77			93	3		310					
SODIUM													

PROJ_NO: 02230	BPS1-TT-MW303I1-01192012							
SDG: 50063-13	LAB_ID	1201254-07						
FRACTION: MF	SAMP_DATE	1/19/2012	1/19/2012					
MEDIA: WATER	QC_TYPE	NM						
	UNITS	UG/L						
	PCT_SOLIDS	0.0	0.0					
	DUP_OF							
PARAMETER		RESULT	VQL	QLCD				
CHROMIUM		0.23	J	Р				
IRON		70						

PROJ_NO: 02230	NSAMPLE	BPS1-FB02-01232012			BPS1-RB02	BPS1-RB02-01232012			BPS1-TT-MW301D-01232012			BPS1-TT-MW303I2-01192012		
SDG: 50063-13	LAB_ID	1201310-08			1201310-06	1201310-06			1201310-05			1201254-06		
FRACTION: MISC	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012	1/23/2012			1/19/2012		
MEDIA: WATER	MEDIA: WATER QC_TYPE NM			NM			NM	NM UG/L			NM UG/L			
	UNITS	IITS UG/L		UG/L	UG/L									
	PCT_SOLIDS 0.0		0.0	0.0			0.0			0.0				
	DUP_OF													
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
HEXAVALENT CHROMI	JM	0	.5 J	Р		1 U		86	3			1 U		
TOTAL ORGANIC CARB	ON													

1 of 2 3/29/2012

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MV	V306D-0	1232012	BPS1-TT-MW	232012	BPS1-TT-MW	BPS1-TT-MW306S-01232012			
SDG: 50063-13	LAB_ID	1201310-02			1201310-04		1201310-07				
FRACTION: MISC	SAMP_DATE	1/23/2012			1/23/2012		1/23/2012	1/23/2012			
MEDIA: WATER	QC_TYPE	NM			NM			NM			
	UNITS	UG/L			UG/L		UG/L				
	PCT_SOLIDS 0			0.0			0.0				
	DUP_OF										
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
HEXAVALENT CHROM				1	U		1	U			
TOTAL ORGANIC CAR	110	0		3300			710	J	Р		

Appendix E

SAP Addendum

# SAMPLING AND ANALYSIS PLAN ADDENDUM ADDITIONAL GROUNDWATER INVESTIGATION SITE 1 – FORMER DRUM MARSHALLING AREA NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) BETHPAGE BETHPAGE, NEW YORK

### INTRODUCTION

This Work Plan Addendum has been prepared for the Mid-Atlantic Division of the Naval Facilities Engineering Command (NAVFAC) under Contract Task Order (CTO) WE44 issued by the Mid-Atlantic Division of NAVFAC under the Comprehensive Long-Term Environmental Action Navy (CLEAN) III contract number N62470-08-D-1001. This document is an addendum to the May 2010 Sampling and Analysis Plan (SAP) PCB Investigation (herein referenced as the SAP) and the July 2011 Interim Data Summary Report at Site 1 – Former Drum Marshalling Area. This SAP addendum addresses the installation of additional monitoring wells to further investigate potential upgradient sources and the extent of PCB- and hexavalent chromium-contaminated groundwater north of Site 1.

### **SCOPE AND OBJECTIVE**

A total of eight monitoring wells will be installed at five locations during this additional groundwater investigation. Shallow water table monitoring wells will be installed at each location and three of the five well locations will include an intermediate monitoring well (approximately 180 feet bgs.) as presented on Figure 1. Split spoon samples and gamma logging will be used to interpret lithology at each of the proposed monitoring well locations and determine actual well screen intervals. The objective is to further investigate and evaluate PCB- and hexavalent chromium-contaminated groundwater north of Site 1, the former NWIRP recharge basins, and former sludge drying beds and also assess potential upgradient sources (i.e., former Grumman recharge basins as depicted on Figure 1). After well installation, groundwater samples will be collected from the new and existing monitoring wells and analyzed for volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), total chromium, and hexavalent chromium to further evaluate impacts to groundwater. Groundwater investigative activities will be conducted in accordance with the procedures outlined in the SAP. Results from these additional investigative activities will be evaluated and presented in a data summary report to support future remedy evaluations and determine whether Site 1 is a statistically significant source of PCBs detected in groundwater.

### **SOIL BORINGS**

Soil borings will be advanced via hollow stem auger (HSA) drilling methods at each monitoring well location/cluster. Each soil boring will be advanced to a depth of approximately 70 feet below ground surface (bgs) at each shallow well location and to approximately 200 feet at each intermediate well location. Lithology will be obtained at each soil boring via split spoons at select intervals and gamma logging from the total depth to the ground surface. The split spoon samples and gamma logs will be used to determine the actual screened intervals for monitoring well installation at each location.

### MONITORING WELL INSTALLATION

Eight monitoring wells will be installed via HSA drilling methods at the locations presented on Figure 1. Five monitoring wells will be installed along Aerospace Boulevard on former Navy property (BPS1-TT-MW310S, -MW311S, -MW311I, -MW312S, and -MW312I). Pending a Navy access agreement, one shallow monitoring well will be installed northeast of the recharge basins (BPS1-TT-MW313S). Two monitoring wells, shallow and intermediate, will be installed approximately 100 feet east of the southeastern recharge basin (BPS1-TT-MW314S and -MW314I). The monitoring wells will be used to further define the extent of upgradient PCB- and hexavalent chromium-contaminated groundwater and also help determine whether other upgradient sources may be contributing to contamination detected upgradient of Site 1. Table 1 provides a summary of estimated screened intervals for the monitoring well installation. Each monitoring well will be developed prior to groundwater sampling.

Soil cuttings and/or fluids generated from the soil boring and monitoring well installations will be field screened for evidence of contamination (visual staining or elevated photoionization detector [PID] readings >10 parts per million [ppm]). If contamination is suspected, those soils will be segregated and characterized for disposal. All soil cuttings will be containerized in 55-gallon drums or roll off containers, sampled, and managed as Investigation Derived Waste (IDW).

### **GROUNDWATER SAMPLING**

Groundwater samples will be collected from each new and existing monitoring well and sampled for VOCs, PCBs, total chromium, and hexavalent chromium as presented in Table 1. Three additional monitoring wells (BPS4-AOC22-MW05, -MW06, and -MW10) from AOC22/Site 4 will be included in this sampling event to help characterize the shallow groundwater west of the

existing downgradient monitoring wells. A submersible pump (e.g. Grundfos) will be utilized for groundwater sampling and low flow procedures will be followed as outlined in the SAP. Wellhead parameters including pH, temperature, specific conductivity, oxygen reduction potential, turbidity, and dissolved oxygen will be collected during sampling and allowed to stabilize prior to sample collection. Based on the good correlation between field test kits and laboratory confirmatory samples for hexavalent chromium, field test kits will be utilized along with laboratory confirmation samples for hexavalent chromium during this sampling event.

All fluids generated during decontamination procedures and purge water obtained during well installation, development, and sampling will be containerized in a poly tank or Frac tank, sampled, and be managed as IDW.



### TABLE 1 SAP ADDENDUM MONITORING WELL INSTALLATION AND SAMPLING SITE 1 - FORMER DRUM MARSHALLING AREA **NWIRP BETHPAGE, NEW YORK**

Activity	Sample Point ID	Screened Interval (feet bgs)	Sample Analysis	Activity Details
	TTAOC22-MW05	47-67		AOC22/Site 4 Wells added to sampling
	TTAOC22-MW06	52-62		AOC22/Site 4 Wells added to sampling
	TTAOC22-MW10	49-59		AOC22/Site 4 Wells added to sampling
	BPS1-FW-MW01	48.5-63.5 ¹		Site 1 monitoring well network
	BPS1-FW-MW02	49-64 ¹		Site 1 monitoring well network
	BPS1-FW-MW03	52-67 ¹		Site 1 monitoring well network
	BPS1-HN-MW29I	120-130 ²		Site 1 monitoring well network
	BPS1-TT-MW301S	51-61		Site 1 monitoring well network
	BPS1-TT-MW301I	130-140		Site 1 monitoring well network
	BPS1-TT-MW301D	210-220		Site 1 monitoring well network
	BPS1-TT-MW302S	41-51		Site 1 monitoring well network
	BPS1-TT-MW302I1	110-120		Site 1 monitoring well network
	BPS1-TT-MW302I2	140-150		Site 1 monitoring well network
	BPS1-TT-MW302D	203-213		Site 1 monitoring well network
	BPS1-TT-MW303S	46-56		Site 1 monitoring well network
	BPS1-TT-MW303I1	95-105		Site 1 monitoring well network
	BPS1-TT-MW303I2	146-156		Site 1 monitoring well network
	BPS1-TT-MW303D	208-218	TCL VOCs, PCBs,	Site 1 monitoring well network
Monitoring Well	BPS1-TT-MW304S	43-53	Total Chromium	Site 1 monitoring well network
Sampling	BPS1-TT-MW304I1	102-112	Hexavalent Chromium	Site 1 monitoring well network
	BPS1-TT-MW304I2	140-150		Site 1 monitoring well network
	BPS1-TT-MW304D	180-190		Site 1 monitoring well network
	BPS1-TT-MW305S	40-50		Site 1 monitoring well network
	BPS1-TT-MW305I	190-200		Site 1 monitoring well network
	BPS1-TT-MW305D	286-296		Site 1 monitoring well network
	BPS1-TT-MW306S	50-60		Site 1 monitoring well network
	BPS1-TT-MW306I	189-199		Site 1 monitoring well network
	BPS1-TT-MW306D	284-294		Site 1 monitoring well network
	BPS1-TT-MW307S	40.5-50.5		Site 1 monitoring well network
	BPS1-TT-MW307I	188-198		Site 1 monitoring well network
	BPS1-TT-MW307D	276-286		Site 1 monitoring well network
	BPS1-TT-MW308S	54-64		Site 1 monitoring well network
	BPS1-TT-MW308I	156-166		Site 1 monitoring well network
	BPS1-TT-MW308D	250-260		Site 1 monitoring well network
	BPS1-TT-MW309S	53-63		Site 1 monitoring well network
	BPS1-TT-MW309I	160-170		Site 1 monitoring well network
	BPS1-TT-MW309D	252-262		Site 1 monitoring well network
	BPS1-TT-MW310S	60-70 ¹		Shallow well to be screened across water table.
Proposed	BPS1-TT-MW311S	60-70 ¹	TCL VOCs, PCBs,	Shallow well to be screened across water table.
Monitoring Well	BPS1-TT-MW311D	160-170 ¹	Total Chromium	Intermediate well to be screened based on lithology.
Installation	BPS1-TT-MW312S	60-70 ¹	Hexavalent Chromium	Shallow well to be screened across water table.
and Sampling	BPS1-TT-MW312I	160-170 ¹		Intermediate well to be screened based on lithology.
	BPS1-TT-MW313S	60-70 ¹		Shallow well to be screened across water table.
	BPS1-TT-MW314S	60-70 ¹		Shallow well to be screened across water table.
	BPS1-TT-MW314I	160-170		Intermediate well to be screened based on lithology.

Notes: MW - Monitoring Well NA - Not Applicable

Quality Control/Quality Assurance samples will consist of the following:

TCL VOCs - Target Compound List Volatile Organic Compounds

PCBs - Polychlorinated Biphenyls

bgs - below ground surface

¹ - Estimated screen intervals, actual depths to be determined based on lithology

- 10% Duplicate

- 5% MS/MSD

- Field Blank

- Rinsate Blank